

WO 01/53312

PCT/US00/34263

SEQ ID NO: of full- length nucleotide sequence	SEQ ID NO: of full- length peptide sequence	SEQ ID NO: of contig nucleotide sequence	SEQ ID NO: of contig peptide sequence	Priority docket number_ corresponding SEQ ID NO: in priority application	SEQ ID NO:in U.S.S.N. 09/488,725
1734	3520	5306	7092	784CIP2D_82	9867
1735	3521	5307	7093	784CIP2D_83	10010
1736	3522	5308	7094	784CIP2D_84	10011
1737	3523	5309	7095	784CIP2D_85	10052
1738	3524	5310	7096	784CIP2D_86	10057
1739	3525	5311	7097	784CIP2D_87	10085
1740	3526	5312	7098	784CIP2D_89	10139
1741	3527	5313	7099	784CIP2D_90	10142
1742	3528	5314	7100	784CIP2D_92	10165
1743	3529	5315	7101	784CIP2D_93	10173
1744	3530	5316	7102	784CIP2D_94	10173
1745	3531	5317	7103	784CIP2D_95	10273
1746	3532	5318	7104	784CIP2E_1	3121
1747	3533	5319	7105	784CIP2E_2	3628
1748	3534	5320	7106	784CIP2E_4	3673
1749	3535	5321	7107	784CIP2E_5	4018
1750	3536	5322	7108	784CIP2E_6	4467
1751	3537	5323	7109	784CIP2E_7	4865
1752	3538	5324	7110	784CIP2E_8	4916
1753	3539	5325	7111	784CIP2E_9	4923
1754	3540	5326	7112	784CIP2E_10	4926
1755	3541	5327	7113	784CIP2E_11	4962
1756	3542	5328	7114	784CIP2E_12	4963
1757	3543	5329	7115	784CIP2E_13	4964
1758	3544	5330	7116	784CIP2E_14	4988
1759	3545	5331	7117	784CIP2E_15	5835
1760	3546	5332	7118	784CIP2E_16	7682
1761	3547	5333	7119	784CIP2E_17	7682
1762	3548	5334	7120	784CIP2E_18	7699
1763	3549	5335	7121	784CIP2E_19	7707
1764	3550	5336	7122	784CIP2E_20	7707
1765	3551	5337	7123	784CIP2E_21	7752
1766	3552	5338	7124	784CIP2E_22	8357
1767	3553	5339	7125	784CIP2E_23	9065
1768	3554	5340	7126	784CIP2E_24	9324
1769	3555	5341	7127	784CIP2F_1	2976
1770	3556	5342	7128	784CIP2F_2	3559
1771	3557	5343	7129	784CIP2F_3	4021
1772	3558	5344	7130	784CIP2F_4	4474
1773	3559	5345	7131	784CIP2F_5	4566
1774	3560	5346	7132	784CIP2F_6	4705
1775	3561	5347	7133	784CIP2F_7	4707
1776	3562	5348	7134	784CIP2F_8	4712
1777	3563	5349	7135	784CIP2F_9	5008
1778	3564	5350	7136	784CIP2F_10	5009
1779	3565	5351	7137	784CIP2F_11	5015
1780	3566	5352	7138	784CIP2F_12	5015
1781	3567	5353	7139	784CIP2F_13	7724
1782	3568	5354	7140	784CIP2F_14	7725
1783	3569	5355	7141	784CIP2F_15	8828
1784	3570	5356	7142	784CIP2F_16	8830
1785	3571	5357	7143	784CIP2F_17	9739
1786	3572	5358	7144	784CIP2F_18	9896

TRADOCs:1416247.1(%CS7011.DOC)

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TABLE 7

SEQ ID NO:	Predicted beginning nucleotide location corresponding to first amino acid residue of amino acid sequence	Predicted end nucleotide location corresponding to first amino acid residue of amino acid sequence	Amino acid segment containing signal peptide (A=Alanine, C=Cysteine, D=Aspartic Acid, E=Glutamic Acid, F=Phenylalanine, G=Glycine, H=Histidine, I=Isoleucine, K=Lysine, L=Leucine; M=Methionine, N=Asparagine, P=Proline, Q=Glutamine, R=Arginine, S=Serine, T=Threonine, V=Valine, W=Tryptophan, Y=Tyrosine, X=Unknown, *=Stop Codon, /=possible nucleotide deletion, \=possible nucleotide insertion)
5359	337	1131	AHLSARLSALILDEVAILPAPQNLSQLSTNMKHLMMWSPVIAPG ETVYYSVEYQEYESLYTSHIWIPSSWCSLTERGPECVDVDDITA TVPYNLVRATLGQSQT/CLEHP/VSIPLIETQPSLPDL/RMEI TKDGFHLVIELEDLGPFEEFLVAYWRREPGEAEHVVKMVRSGGIP VHLETM3EGAAYCVKAQTFVKAIGRYSAFSQTETCVCVQGEAIPL VLALFAFVGFMILLUVVPLFWVKMGRLLQ/YLLLPRGGSSQTPW KITQF
5360	2	1115	PRVRSSGGQQEDPASQOWARPRFTQPSKMRRIVIARPVGSSVRLK CVASGHPRPDITWMKDDQALTRPEAAEPRKKWTLSLKNLRPED SGKYTCRVSNRAGAINATYKVDTVIOORTSKPVLTGTHPVNTTVD FGGTFSFQCKVRSNDVKPVFIQWLKRVEGAERGRHNSTIDVGGQKF VVLPTGDUWSRPDGSYLNKLILLTRARQDDAGMYICLGANTMGYS FRSAFLTVLPDPKPPGPPVASSSSATSLPWVVIGIPAGAVFIL GTLLWLCOAQKPKCTPAPAPPLPGHRRPGTARDRSGDKDPLSL AALSAGPGVGLCEEHGSPAAQPHLLGPGPVAGPKLYPKLYTGH TPITYTHPPPSQCQLNNSHS
5361	3	925	HEGSISSANILLDDQFQPKLTDFAMAHFRSHLEHQSCINTMTSS SSKHLWYMPEEYIROGKLSIKTDVYSGIVIMEVLTGCRVVLDD PKHIQLRDLLRELMKEKRGDLSCSFLDKVPPCRNFSAKLFCL AGRCAATRAKLRPSMDEVNLTESTQASLYFAEDPPTLSKSFR PSPLPLENVPSIPVEDDESQNNNLLPSDEGLRIDRMTQKTPFEC SQSEVMFLSLDKKPKESKRNEEACNMPSSCEESWFPKYIVPSQD LRPYKVNIIDPESSEAPGHCSRSRPVESSCSSKFSWDEYBQYKKE
5362	2	4879	SCQVEGCTR TYNSQSISGKHMKTAHPDQYAAFKMQRKSKKGQKA NNLNTPNNNGKFVYFLPSPVNNSNPFFTSQTKANGNPACSAQLQH VSPPIFPAHLASVSTPQLLSSMESVINPNITSQDKNEQGGMLCSQ MENLPSTALPAQMEDLTKTVLPLNIDRGSDFPLSLPARSSSIDL FPSPADSGTNVSQLENNNTNHSSQIEGNTSSFLKGNGENA VFPSQVNANNFSNSTNAQQAPEKVKDKRCRGQTGKERPKHINK RAKWPAlIRDGKFICSRCYRAFTNPRSLGGHLSKRSYCKPLDGA EIAQELLQSNQGSPSLLASMLSTNAVNLQQPQQSTFNPEACFKD PSFLQLLAENRSPAFPLPNTFPRSGVTNFNTSVSQEGSEIIIOAL ETAGIPSTFEGAEM\SHVSTGCVSDASQVNATVMPNPTVPPLLH TVCHPNTLTLTNQNRTSNSKTSIECSSLPPVFTNDLLKTVEN GLCSSSFNPNSGGPSQNFTSNSSRVSVISGPQNTRSSHLNKGN ASKRKVVAAPPLIAPNASQNLVTSDSLTTMGLIAKSVIEPTTNLH SNVIPTCEPQSLVENSENLTQKLNNNNNQLFMTDVKENFKTSLESHT VLAPLITLKTEENGDSQMMALNSC\TSVNSDLQISEDNVIQNFEKT LEIIIKTAMNSQILEVKSGSQAGETSQNAQINYNQIQLPSVNTVQ NNKLPDSSP\FSSFISVMPTESENIPPOSE\VSHKEDQIOEILEGL QKLKLENDLSTPASQCVLINTSVTLPPTPVKSTADITVIQPVSE MINIQFMDKVNKPFCVQCNQGCNYSAMTKDALKHYGKIHQYTPE MILEIKKNQLKFAPPFKCVPCTKTFTRNSNLRAHCQLVH:FTT EEMVKLKIKRPyGRKSQSENVPASRSTQVKKQLAMTEENKKEQ PALELRAETQNTHSNVAVIPEKQLJKEKKSPDKTESSLQVITVTS EQCNIATLNTQTKGRKIRRHKEKEBKKRKPVSQSLEFPTRY SPYRPyRCVHQGCFAAFTIQQNLLILHYQAVHKSDLPAFSAEVEE ESEAGKESEETETKQTLKEFRQCQVSDCSRIFQAITGLIQHYMKL HEMTPEEIESMTASVDPVGKFCPCDQLECKSSFTTYLNYVVHLEAD HGIGLRASKTEEDGVYKCDCEGCDRIYATRSNLLRHIFNKHNDK HKAHLIRPPLLTPGQENMSSKANQEKSKSXHRTGKHSRCGKEGI KMPKTKRKKKNNLENKNAKIVQIEENKPYSLKRGKHVYSIKARN DALSELECTSRFTVQYPCMIKGCTSUTSESNIIRHYKCHKLKAF TSQHRNLLIVFKRCNCNSQVKETSEOEAGAKNDVKDSDTCVSESND NSRITATVSQKEVKE*DEMDELTELFITKLINEDSTSvetQA NTSSNVNSNDFQEDNLCQSERQKASNLKRVNKEKNVSQNKKRKE KAEPASAAELSSVRKEETAVAJQTIEEHPSFDWSSFKPMGFE VSFLKFLEESAVKQKNTDKDHPTGNKKGSHSNRKNIIDKTA TSGNHVCPCKESETFVQFANPQLQCSNDNVKIVLDKNLKDCTEL

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5363	8066	703	VLKQLQEMKPTVSLKKLEVHSNDPDM SVMKD ISIGKATGRGQY RLCCTGGGE GTPGASGKRGPA ATTSLVLCIPS VPPPVPFFTLWP PPSWRQP PGGI RRDFS RRLR REANLV ATCLPV RASLPH RLNML RGPGPG LLLLAVL CLGT AVPSTGASK SKRQA QMVQ PQSPVA VS QSKPGCYDNGKHYQINQQWERTYLGNA LVCTCYGGSRGFNCESK PEAEETCFDKYT CNTYRVGDTYERPKDSM IWDC TCIGAGR GRIS CTIANRCHEGGGOSYKIGDTWRRPHETGGYMI ECVCLGNGKGEWT CKPIAEKCFDHAAGTSYVVGETWEKP YQGWM MV DCTCLGE GSGR ITCTSRNRCNDQDTRTSYRIGDTWSK KDNRGNLLQCI CTGNGRG EWK CERHTSVQTSSGSGPFTDVR AAVYQ P QPHQ P PPPYGHCVT DSGVVYSVG MQLA KTQGNKQML CTCLGNGVSCQ ETAVT QTYG GNSNGE PCVLPFTYNGRTFYSCTEGRQDGHLWCSTTS NYTDCTSEGR DNMKWC GTTQNYDADQKFGCPMAAHEE ICTTNEGV MYRIGDQW DKQHD MGHMMRCTC VGN GRGE WTCA IASQ LRDQ CIVDDITYVN DTFH KRHEEGHMLNCTCFGGQGRW KCDPVDQCQDSETGTFYQI GDSWEKYVHGVRYCCYCYGRGIGEWHCQPLOTYPSSSGPVEVF TETPSQPN SHPIQWNAPQPSHISKYI LWRWP KNSVGRWKEATIP GHLNSYTI KGLKPGV VYEGQ LSIQ QYGHQEVTRFDFTTTST PVT SNT \V TGETTF FSPL VATSE SVTE ITASSF VV SWAS DTV SGFR VEYEL SEE GDEPQ YL VPSTAT SV\NIP\ DLLPGR KYIVN VYQI SEDGE QSL LILSTS QTTA PAPP DFTV DQV DDT SIV VRW SR PQAP ITGYRIVYSPS VEGS STELN L PETAN S VTL SD L QPG QCN ITIYAVEEN QESTPVVIQ QETTGT PRSDT VSPR DLQF VEV TDV KVTIMWTPPE SAVTGYRVDV I FPVN LPGE HGQRLPLSRNT F AEN TGLSPGV TYFV KFAV SHG RESKPLTAC TTKL \DAP TNLQ FVN ETD STV LVRW TPRA QITGYR LTV GLTR RGQPR QNV GPVS SKY PLRN LQPA SEYTV SVAIKGNQESPKATGVFTLQ PGSSIPPYN TEV TETTIVI T WTPA PRIGFKLGV RPSQ GGEA PREV TS DSG SIV VSGLTPG VYVYI T QVLR DQGR DAP \IVNK \V VTP LSP PTNLH LEAN PDTG VLT VSWERS TTPD ITGYR IT TTPNGQ QGNS LEEVV HADQSSCTF \DN LEVPGLEY NSVY TVK DDKES VPIS DT I PAV PPPTDLRFTN \ILGPDTMRV TW \APPSI DLTN FLV RYSPV KNE GRMLQSL SI FFL SLDN \AVV L\NLLPGT EYV VSVSSV YEQH ESTP \LRGRQKTGLD SP \TGIDFS \DITA \NSFT \VHW \IA PRA \TPI TGYR IR \HHPEHF \SGRP EDR \VPHRSN SITLTN LTPG T EYVV SIVALNGREESPLI GQ QSTV SVD P RDLEV VAA TPT SLLI \SWD APA VT V RY YI T YGETGGN SPV QEF T VPGSK STAT ISGL KPG VD Y TITV YAV TGR GD SPASS KPI SINYR TEID KPSQ M QV TDV QD NS ISV KWLPSSSP V TGYR VTT \PK NGPG \PT KTKTAGPDQ TEMTI EGLQ PT VEY VV SVAQ NPSG E S QPLV QTA VTMIDR PKG LAF IT DV DV DS I KIA WESP QG QV SRY RY T YSSP EDG I HLF PAP DGE DTA E LQGLR PGSE YTV SVA L HD MME S QLIGT QSTA I PAP TDL KFT QVTP TSL SAQ WTP PN V QLT GYR V RTP K E K TGP MKE I NLAD SS SV VSGL MVA T K YEV S VY AL K DLT S RPA QGV TT LEN VSP R ARV T DATE T T T I S WRT K T E T I T G FQ V D A V PANG QTP I QRT I K P DVR SYT IT GLQ PG I D YK I YLY TL NDN ARSS P V VID A TA DAPS NLR FLA IT PNS LLV S WQP PRAR IT GY I I K YEK PG S P P R V V P R P RPG VTE A T IT GLB PG T EY T I YV I AL KNN QK S EPLI GR K K T D ELP QLV TL PH PNL HCG PE I LD P STV QK T P FV TH PG YD T GNG I QL PGT S Q Q P S V G Q Q M I FEE HG F R R T T P P T T A T I R H R P R P Y P P N V Q O E A LS QTT ISWAP F QDT SEY II S CHP VGT D E E F L Q F R V P G T S T S A T L T G L T R G A T Y N I I V E A L K D Q Q R H K V R E E V V T G N S V N E G L N Q P T D D S C F D P Y T V S H Y A V G D E W E R M S E G F K L L C Q C L G F G S G H F R C D S S R W C H D N G V N Y K I G E K W D R Q G E N G Q M M S C T C L G N G K G E F K C D P H E A T C Y D D G K T Y H V G E Q W Q K E Y L G A I C S C T C F G G Q R G W R C D N C R R P G G E P S P E G T T G Q S Y N Q Y S Q R Y H Q R T N T V N C P I E C F M P L D V Q A D R E D S R E
5364	8066	703	RLCCTGGGE GTPGASGKRGPA ATTSLVLCIPS VPPPVPFFTLWP PPSWRQP PGGI RRDFS RRLR REANLV ATCLPV RASLPH RLNML RGPGPG LLLLAVL CLGT AVPSTGASK SKRQA QMVQ PQSPVA VS

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			QSKPGCYDNGKHYQINQQWERTYLGNALVCTCYGGSRGFNCESK PEAETCFDKYTGNTYRVGDTYERPKDSMIWDCTCIGAGRGRIS CTIANRCHEGGQSXKIGDTWRRPHETGGYMLECVCLGNKGGEWT CKPIAEKCFDHAAGTSYVVGETWEKPYQGWMMDCTCLGEGSGR ITCTSRNRCNDQDITRTSYRIGDTWSKDKNRGNLLQCICCTGNGRG EWKCEHTSVQTSSSGSPFTDVAAYVQPQPHPPPPPQYHCVT DSGVYVSVMQLA*KTQGNKQML\CTCLGNVSCQETAVTQTYG GNSNGEPCVLPFTYNGRTFYSCTTEGRQDGHLWCSTTSNYEQDQ KYSFCTDHTVLVQTRGGNSNGLCHFPFLYNNHHNYTDCTSEGRR DNMKNCGTTQNYDADQKFGFCMAAHEEICTTNEGVMYRIGDQW DKQHDHMGHMMRCTCVGNGRGEWTCAIASQI RDQCIVDDITYNVN DTFHKRHFEGHMLNCTCFGQGRWRKCDPVQCDSETGFFYQI GDSWEKYVHGVRVYQCYCYGRGIGEWHCQPLQTPSSSGPVEVFI TETPSQPNSHPIQWNAPQPSHIISKYILRWRPKNSVGRWKEATIP GHLSNSYTIKGLKPGVYVEGLISIQQYGHQEVTRFDFTTTSTST PVTNT\VTGETTPFSPLVATSESVTEITASSFVVSWSASDTV SGFRVEYELSEEGDDEPQYLVLPSSTATSV\NIP\DL\LPGRKYIVN VYQISEDGEQSILSTSQTTPADAPPDPTVQVDDTSIVVRWSR PQAPITGYRIVYSPSVEGSSTEELNLPETANSVTLSDLQPCVQYN ITIYAVEENQESTPVVIQQETTGTPRSRTVPSPRDLQFVEVTDV KVTIMEWPESAVTGYRVDIVIPVNLPGEHGQRQLPLSRNTF\AEN TGLSPGVYYFKVFAVSHGRESKPLTAQTTKL\DAPTNLQFVN ETDSTVLRWTPRAQITGYRLTVGLTRRGQPRQYNVGPVSVKY PLRNLQPASEYTVSLVAIKGNQESPATGVFTTLQPGSSIPYPN TEVTETTIVITWTPAPRIGFKLGVVRPSQGGEAPREVTSDGSIV VSGLTPGVEYVYTIVQLRDGQERDAP\IVNK\VVTPLSPPTNLH LEANPPDTGVLTWSWERSTTPDITGYRITTTPTNGQQGNSLEEVV HADQSSCIF\DNLEVPGLEYNSVYTVKDDKESVPISDTIIPAV PPPTDLRFTN\ILGPDTMRVTW\APPPSIDLTNFLVRYSPVKNE GRMLQSLSIFFLSDN\AVVLTNLLPGTEYVSVSSVYEQHESTP \LRGRQKICLDSP\TGIDFS\DTIA\NSFT\VHW\IAPRA\TPI TGYRIR\HHPEHF\SGRPREDR\VPHSRNSITLTNLTPGTEYVV SIVALNNGREESPLIGQQSTVSDVPRDLEVVAATPTSLLI\SWD AFAVTVRYRITYGETGCCNSPVQEFTVPGSKSTATISGLKPGVD YTITVYAVTGRGDPSASKPISINYPTEDKPSQMQVTDVQDNS ISVKWLPSSSPVTVGYRVTTT\PKNGPG\PTKTKTAGPDQEMTI EGLQPTVBYVVSVVAQNPSGESQPLVQTAVTNIDRPGKLAFTDV DVDSIKAIESPQGQVSRVYRTYSSPEDGIHELFPAFDGEEDTA ELQGLLRPGSEYTVSVVALHDDMESQPLIGTQSTA\PAFTDLKFT QVTPTLSAQWTPPNVQLTGYRVRVTPKEKTFPMKEINLAPDSS SVVSGLMVATKYEVSYALKDTLTSRPAQGVVTTLENVSPPR ARVTDATETTITISWRTKTETITGFQVDAVPANGQTPQORTIKP DVRSYTITGLQPGTDYKIYLYTLNDNARSSPPVIDASTAIDAPS NLRFLATTPNSSLVSNQPPRARITGYIIKYEKPGSPPREVPRP RPGVTEATITGLEPGTEYTIYVIALKNNQKSEPLIGRKKTDELP QLVTLPHPNLHGPETILDVESTVQKTFPFVTHPGYDTGNGIQLPGT SGQQPSVGCQOMIEEHGFRRTTTPPTATPIRHRPRPYPPNVCQE ALSQTTISWAPFQDTSEYIISCHPGVTDEEPLQFRVPGTSAT LTGLTRGAZYNIIVEALKDQQRHKVREEVVTVGNSVNEGLNQPT DDSCFDPTVSHYAVGDEWERMSESCF\KLLCOCLGFGSGHFRCD SSRWCHDNGVNWKIGEKWDRQGENGQMMSTCLGNKGFEKCDP HEATCYDDGKTYHVGEQWQKEYLGAICSCCTCGGQRGWRCDNCR RPGGEPSPEGTTGQSYNQYSQRYHQRTNTNVNCPIECFMPLDVQ ADREDSRE
5365	8066	703	RLCCTGGGEGTGPGASGKRPCAATTSVLCLCIPSVPPVPPFTLWP PPSWRROQPGGIGRRDFSRRLRREANLVATCLPVRSALPHRLNML RGPGPGLLLLAVLCLGTAUTPGSTGASKSKRQAQMVQQPQSPVAVS QSKPGCYDNGKHYQINQQWERTYLGNALVCTCYGGSRGFNCESK PEAETCFDKYTGNTYRVGDTYERPKDSMIWDCTCIGAGRGRIS CTIANRCHEGGQSXKIGDTWRRPHETGGYMLECVCLGNKGGEWT CKPIAEKCFDHAAGTSYVVGETWEKPYQGWMMDCTCLGEGSGR

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			ITCTSRNRCNDQDRTSYRIGDTWSKKDNRGNLLQCICCTGNRGREWKCERHTSVQTSSSGSPFTDVRAAVYQPQPHQOPPPYGHCVTDSGVVYSVGMQLA*KTQGNKQML\CTCLGNGVSCQETAVTQTYGGSNGEPCVLPFTYNGRTFYSCTTEGRQDGHLWCSTTSNYEQDQKYSFCTDHTVLVQTRGGNSNGALCHFPFLYNNHNYTDCTSEGRDDNMKWCGTTQNYDADQKFGFCPMAAHEEICTTNEGVMYRIGDOWDKQHDGMGHMMRCTCVGNGRGEWTCIAYSQLRDQCIVDDITYNVNDTFHKRHEEGHMLNCTCFGGQGRWRKCDPVDQCQDSETGTFYQIGDSWEKYVHGVRVQCYCGRGIGEWHCQPLQTPSSSGPVVEVFI TETPSQPNSHPIQWNAPQPSHISKYLRLWRPKNSVGRWKEATIPGHLSNTIKGLPKGVVYEGQLISIQQYGHQBVTRFDFTTTSTSTPVTNT\VTGETTPFPSPLVATSESVTEITASFVVSVWSASDTV SGFRVEYELSEEQDEPQYLVLPSSTATSV\NIP\DLLPGRKYIVNVYQISEEDGEQSLLSTSQTAPDAPPDPTVDQVDDTSIVVRWSRPOAPITGYRIVYSPSVEGSSTELNLPEТАNSVTLSDLQPVQYN ITIYAVEENQESTPVVIQETTGTPRSDTVPSPRDLQFVEVTDVKVTIMWTPPESAVTGYRVDVIFVNLPGEHGQRLPLSRNT\AENTGLSPGVTVYFKVFAVSHGRESKPLTAQOTTKL\DAFTNLQFVN ETDSTVLRWTPPRAQITGYRLTVGLTRRGQPRQYNVGPVSKYPLRNLQPASEYTVSLVAIKGNQESPATGVFTTLQPGSIPPYNTEVTETTIVITWTPAPRIGFKLGVPRSQQGEAPREVTSDSGIVVSGLTPGVEYYTIQVLRDQERDAP\IVNK\VVTPLSPTTNHLEANPDGTGVLTVSWERSTPDIYGRITTTPTNGQQGNSLEEVVHADQSSCTFDNIEVPGLEYNSVYTVKDKESVPISDTIIPAVPPPDLRFTN\ILGPDTMRVTW\APPSIDLNTFLVRYSPVKEGRMLQSLSIFFLSDN\AVVLTNLLPGTEYVSVSSVYEQHESTP\LRGRQKTLDSL\TGIDFS\DTA\NSFT\VHW\IAPRA\TPI TGYRIR\HHPEHF\SGRPREDR\VPHSRNSITLTNLTGCTEYVVSIVALNGREESPLLIGQGSTVSDVPRDLEVVAATPTSLI\SWD APAVTVRYRITYGETGGNSPVQEFTVPGSKSTATISGLKPGVDYTITVYAVTGRGDSPASSKPISINYRT\TDKPSQM\QVTDVQDNSISVKWLPSSSPVTVGYRVTT\PKNGPG\PTKTKTAGPDQTEMTEGLQPTVBYVVSVYQAQNPSGESQPLVQTAVTNIDRPGKLAFTDV DVDSIKIAWESPQGQVSRYRVTYSSPEDGIHELFFPAPDCEEDTAELQGLRPGEYTVSVALHDDMESPQPLIGTQSTA\APTDLKFTQVTPTSLSAQWTPPNVQLTGYRVRVTPKEKTGPMKEINLAPDSSSVVSGLMVATKYEVSYVALKDTLTSRPAOGVVTITLENVSPPRARVTDATETTITISWRKTETITGFQVDAVPANGQTPIQRTIKPDVRSYTTTGLQPGTDYKLYLTNLNDNARSSPVVIDASTAIDAPSNLRFIAITPNSLLVSWQPRARITCYIIKYEKPGSPPREVVRP RGPVTEATITGLEPGTEYTIYVIALKNNQKSEPLIGRKKTDELQLVTLPHPNLHGPIELDVPSTVQKTPFVTHPGYDTGNGIQLPGTSGQQPSVGQQMIFEEHGFRRTTPTTATPIRHRPRPYPPNQGEALSQTTSWAFQDTSSEYIISCHPVGTDDEPLQFRVPGTSATLTGLTRGATYNIIVEALKDQQRHKVREEVVTVGNSVNEGLNQPTDDSCFDPTVSHYAVCDEWERMSSESFGKLLCQCLGFGSGHFRCDSSRWCHDNGVNYKIGEKWDQGENGQMMSCCLGNGKGEFKCDPHEATCYDDGKTYHVGEQWQKEYLGAICSCCTCGGQRGWRCDNCRRPGGEPSPEGTTGQSYNQYSQRYHQRTNTNVNCPIECFMPLDVQADREDSRE
5366	8066	703	RLCCTGGGEGTGCAAGSKRGPAAATSLVLCITPSVPPVPPFTLWPPPSWRQOPPGGIRRDFSSRRLRREANLVATCLPVRASLPHRLNMLRGPGPGLLLAIVICLCTAVPSTGASKSKRQAOQMVQOPQSPVAVSQSKPGCYDNGKHYQINQQWERTYLGNALVCTCYGGSRGFNCESKPEAEETCFDKYTGTGNTYRVGDTYERPKDMSIWDCTCIGAGRGRISCTIAMRCHEGGQSYKIGDTWRRPHETGGYMLECVCLGNGKGWECKPIAKCFDHAAGTSYVVGETWEKPYQGWMMVDCCLGEGSGRITCTSRNRCNDQDRTSYRIGDTWSKKDNRGNLLQCICCTGNRGREWKCERHTSVQTSSSGSPFTDVRAAVYQPQPHQOPPPYGHCVTDSGVVYSVGMQLA*KTQGNKQML\CTCLGNGVSCQETAVTQTYGGSNGEPCVLPFTYNGRTFYSCTTEGRQDGHLWCSTTSNYEQDQ

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			KYSFCTDHTVLVQTRGGNSNGALCHFPFLYNNHNYTDCTSEGRR DNMWKCGTTQNYADQKFGFCPMMAHEBICITINEGVMYRIGDQW DKQHDMGHMMRCITCVGNGRGEWTCIAYSQRLDQCIVDDITYNVN DTFHKRHEEGHMLNCTCFGQGRGRWKCDPVDQCDSETGTFYQI GDSWEKYVHGVRYQCYCYGRG1GEWHCQPLQTYPPSSGPVEVFI TETPSQPNSHPIQWNAPQPHISKYILRWRPKNSVGRWEATIP GHLNSYTICKLKGPKGVVYEGQLISIQQYGHQEVTRFDFTTSTST PVTNT\VTGETTIPFSPLVATSESVTEITASSFVVSVWSASDTV SGFRVEYELSEEDEPQYLVLESTATSV\NIP\DLLPGRKIVN VYQISEDGEQSLILSTSQTTAPDAPPDTVDQVDDDTSIIVRWSR PQAPIGYRIVYSPSVEGSSTELNLPETANSVTLSDLQPGVQYN ITIYAVEENQESTPVVIQQETTGTGTPRSETVSPRDLQFVEVIDV KVTIMWTPPESAVTGYRVDVIFVNLPGEHCQRLPLSRNTF\AEN TGLSPGVITYFKFAVSHGRSKPLTAQQTTKL\DAPTNLQFVN ETDSTVLVRWTTPRAQITGYRLTGVLTRRGQPRQYNVGPSVSKY PLRNLPQASEYTVSLVAIKGNQESPKAQVFTTLQPGSSI\PPYN TEVTETTIVITWTPAPRIGFKLGVRPSQGGAPREVTSDDGSIV VSGLTPGVYVYTIQVLRDGQERDAP\IVNK\VVTPLSPTLNH LEANPDGTGLTVSWERSTTPDITGYRITTTFTNGQOGNSLEEVV HADQSSCTF\DNLEVPGLEYNSVYTVKDDKESVPISDTIIPAV PPPTDRLRTFN\ILGPDTMRVTV\APPPSIDLTNFLVRYSPVKNE GRMLQSLSIFFLSDN\AVVLTNLLPGTEYVSVSSVYEQHESTP \LRGRQXTGLDSP\TGIDFS\DTIA\NSFT\VHW\IAPRA\TPI TGYRIR\HHPEHF\SGRPREDR\VPHSRNSITLTNLTPCTEYVV SIVALNGREESPLLIGQQSTVSDVPRDLEVVAATPTSLI\SWD APAVTVRYYRITYGETGGNSPVQEFTVPGSKSTATISGLKPGVD YTITVYAVTGRGDSPASSKPIISINYRTEIDKPSQMQVTDVQDNS ISVKWLPSSSPVTGYRVTT\PKNGPG\PTKTKTAGPDQTEM TI EGLQPTVEYVVSVAQNPNGSESQPLVQTAVTNIDRPKGLAFTDV DVDSIKIAWESPQGQVSRYRVTYSSPEDGTHELFPADCEEDTA ELQGLRPGSEYTVSVVALHDDMESQPLIGTOSTAIPAPTDLKFT QVTPTLSQAQWTPPNVQLTGYRVRVTPKEKTGPMKEINLAPDSS SVVVSGLMVATKYEVSVYALKDTLTSRPAQGVVTTLENVSPRR ARVTDATETTITISWRTKTEITITGFQVDAVPANGQPICRTIKP DVRSYTITGLQPGTDKIYLYTLNDNARSSPVVIDASTAIDAPS NLRFIATTTPNSLLVSWQPPRARITGYI1KYEKPGSPPREVVPRP RPGVTEATITGLEPGTBETYIYVIALKNNOKSEPLIGRKKTDEL P QLVTLPHPNLHGPEILDVPSVQKTPFVTHPGYDTGNGIQLPGT SGQQPSVGQQMIFEEHGFRRTTPPTATPIRHRPRPYPPNVQGE ALSQT\ISWAPFQDTESEYIISCHPVGTDEEPLOQFRVPGTSTSAT LTGLTRGATYNIIVEALKDQQRHKVREEVVTGVNSVNEGLNQPT DDSCFDPTVSHYAVGDEWERMSESGFKLLCQCLGFGSGHFRCD SSRWCHDNGVNYYKIGEKWDRQGENGQMMSTCLGNKGGEFKCDP HEATCYDDGKTYHVGEQWQKEYLGAICSCCTFGQGRWCDCNCR RPGGEPSPEGTTGQSYNQYSQRHYQRTNTNVNCPIECFMPLDVQ ADREDSRE
5367	235	3591	KKILMLCKKNIVIEYLADILYELYGFCFCGKIKYLIHVRL ILELWMTRLLLEKSVSLQTOQYLLLIVKILSWFPGKEMRHHLQIM EVMMRKQDS\RIVGNGSEQQLQKELADVLMDPPMDDQ\GEKEVEL KRSQLDGEGDGPLSNOISASSTINPVPVLVGLOKPEMSLPVKPGQ GDSEASSPFTPVADEDHSVFSKLTLYLGCAVNAPRSEVEALRMM SILRSQCQISLDVTLSPNVSEGIVRLLDPQTNTIEANYPIYKI LFCVRGHDGTPESDCFAFTESHYNAELFRIHVFRCEIQEAVSRI LYSFATAFRRSAKQTPLSATAAPQTPDSDFITFSVSLEIKEEDG KGYFSAVPKDKDRQCFKLRQGIDKKIVIYVQQTNTKELAIERCF GLLLSPGKDVRNSDMHLLDLESMGKSSDGKSYVITGSWNPKSPH FQVNVNEETPKDKVLFMTTAVDLVITEVOEPVRLLETKVRCVSP NERLFWPFSKRSTTENFFLKLKQIKQERERKNNTDTLYEVVCLES ESERERRKTTASPSVRLPQSGSGQSSVIPSPSPEDDEEEDNDEPLL SGSGDVSKECAKILETWGELLSKWHLNLNVRPKQLSSLVRNGV PEALRGEVWQLLAGCHNNNDHLVKEYRILITKESPQDSAITRDIN

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			RTFPFAHDYFKDTGGDQDSLKYICKAYSVYDEEIGYCQGQSFLA AVLLLHMPPEEQAFSVLVKIMFDYGLRELFKQNFEDLHCKFYOLE RLMQEYIPDLYNMHFLDISLEAHMYASQWFLTLFTAKFPLYMVFH IIDLLCCEGISVIFVNVALGLLTKSKD DLLTDFEGALKFPRVQL PKRYRSEENAKKLMEACANMKISQKLLKKYEKEYHTMREQQAQO EDPIERFERENRRLQEANMRLEQENDDLAHELVTSKIALRKLD NAEEKA DALNKE LLMTKQKLIDAE EEEKRLBESAH LKKMC RE LDKA ESEIKKNSSII GDYKQICSQLSER LEKQQTANKVIEKIR QKV DDCERCREFFNKEGRVKGISSTKEVLD ETD EKETLK NQL REMELELAQTKI\QLV EAECI QD\LEHPF*GLPFNE\VQAA\K KTWFNRTLSSIKATGVQGKETC
5368	573	2014	GAAAGAADP RRGSLGGRTMLDFATI FAVTFLLALVGAVILYLYPAS RQAAGIPGIPTEKDGNLPDIVNSGS LHEFLVNLH ERYGPVVS FWFGRRLLVSVSLGTVDVLKQHINPNKTLD/LF*NHAEVIIKVSIW WWQCE*KP\QRKKLYENGVTDSLKSNSNFA LLLKLP EELLDKWL SY PETQH\VE LSQHMLGFAMKS VTMQVMGSTFEDDQE VIRFQXNHG TVWSEIGKGFLDGS LDKNMTRK COYED ALMOLES VLRNI KERK GRNF SQHIFIDS\ VQGNLNDQ QILED SMIFSLASCI ITAKLC TW AIWFLTTSEEVQKLYEEINQVFGNGPVTP EKIEQLRYCQHVLC ETVRTAKLTPVSAQ LQDIEGKIDRFIIPRE TLVLYALGVV LQD PNTWPSPKFDPDRF DDELVMKTFSS LGFSGTQECPELRFAYMVT TVLLS VLVK RLHL SVEGQVI ET KYELV TSSREE A WI TVS KRY
5369	1	6622	PRSLCFSIWL AEEA VLA VDAGGL RRRR RLLRG TMSASF VNG ASLED CHCNLFCLADLTG IKWKKYVWQGPT SAP I LPVTEEDPILSSFS RCLKADVLG\WVRDQRPERRE\L*IFWGGBDP\VLLTLPMTY QKKKMECGRMDFP MNNAVLCFSKAVHNLLERCLMN RN FVRIGKWF VKPYEKDEPKINKSEHLS CSFTFLHGD SNVCTS VEINQHQPVY LLSEEHITLAQQS NSPQ FV QVILCPFGLNGTLTGQAFKMSD ATKK LIGEWKQFYFISCLKEMSEEK QEDMDWE DDSLAAVEV LVA GVR MIYPACFVLPQSDIPTPSVPGSTHCSSCLGVHQPAST RDPA MSSVTLTPPTSPEEVQTVDPQSVQK WVKFSSVSDGFNSD STSHH GGKIPRXL ANHVVDRVWQBCNMNR A QNK R K Y SASSGGLCE EATA AKV ASWDFV EAT QRTNC SCLR HKNL KSRNAGQQQAPSLGQQQ Q ILPKHKTNEKQEKSEKPKQKRPLTPFHHRVSVSDDVGMD\ADS\ A SQRLV\ISAP\DSQ\VRFSNIR\TNDAK\TPQMHGTE MANS PQ PPL LSP\HPCD VV D EGV TKT\STPQSQHF YQ MPTP DPLVPSKPM EDRIDSLSQFPPQYQEA VEP T VYGVTA VNL EDEANIAWKYYK FPKKDV EFLP PQLPSDRKF KDDPVG PFGQ E SVT SVTEL MVQCKK PLKVSDELVQ QYQ IKNQ CLS A IAS DAEQ EPKIDPYA F VEG DEEF LFPDKKDRQN SER EAGKKH KVED GTSS VTVL SHEEDAM S L FSPS IKQDAPRPT SHARP STS LIYDSDL AVS YT DLDN L FNS D EDELT PGSKRSANGSDDKASCKBSKTGNL DPLSCISTADLHKM YPT PPS LEQHIMGFS PMNNM KEYGSM DTTPG GTVLEG NSSSIGA QFKIE VDEGFCSPKPSEI KDFSYVYK PENCQ ILVCCSMF APLKTLPSQY LPLI KLP EECIYR QSWTV GKLE L LSSG PSMPFI KEGD GS NMDQ E YGTATYTPQTH TSCGM PPS APPS NSNGA GILP SPST PRFPT P RTP RTRPT RGA GGP PASA QGS VKYEN SDI YSPAST P STCRPL N SVEP ATVPSIPEAH SLYV NL L LSES VNM L FKDCN S D C C I CVC NM NI K GADVG VYI PDP T QEA QYRC TCG FSA VMN RKG FNN SGL FFE D ELD I I G RNT DCG K EAKR FEAL RAT SAEH VNG GL KESE K L S D D L ILL LQD QCT NL FSPFGA ADQDPFPK SGV I S N W V R V E E R D C C N D C Y I A LEHGRQFMDNMSGKV D EALV KSS CI LHPW SKRN D VSM QCS QD I L RM LLSL QPV L QDA I QKK RTV RP GVG QPL T WQ QFHKMAGR GS YG TDESPEPLPIPTFLLG YD YD LV LSP FAL PYW ERL M LEPY GS QR DIAYV V LCP EN E ALL NGAKS FFR DLT A IYES CRLG QH R P V S RLL TDGIM RVG ST ASK L SEK L VAE WF SQ A ADG NNEA FSK L K LYAQV CRYD LGY LASLPL DSS LLSQ PN VAP T Q S L I T P P Q M T N T G N A NTPS A T L A S A A S S T M T V T S G V A I S T V A T A N S L T T A S T S S S S S N L N S G V S S N K L F S F P P F G S M N S N A A G S M S T Q A N T V Q S G Q L G G Q Q T S A L Q T A G I S G E S S L P T Q P H P D V S E T M D R D K V G I P T D G D S H A V T Y P P A I V V Y I I D P F T Y E N T D E S T N S S S V W T L G L L R C F L E M V Q

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			TLPPIHKSTVSQIIPCOYLLQPVKHEDREIJYPQHLKSLAFSAFTQCRPLPTSTNVKTLTGFPGPLAMETALRSPDRPECIRLYAPPFILAPVKDKQTELGETFGEAQKYNVLFVGYCLSHDQRWILASC TDLYGELLETCIINIDVPNRARRKKSSARKFGLQKLWEWCLGLVQMSSLPWRVVIGRLGRIGHGEKLDWSCLLSRRNLQSLSKRLKDM CRMCGISAADSPSILSACLVAMEPQGSFVIMPDSVSTGSVPGRS TTLNMQTSQLNTPQDTSCTHILVFPTSASVQVASATYTNLDL AFNPNNNDGADGMGIFDLDLTDGDDLPDIINILPASPPTGSPVHSP GSHYPHGGDAGKGQSTDRLLSTEPHEEVPNILQQPLALGYFVSTA KAGPLPDWFWSACPQAQYQCFLFLKASLHHVPSVQSDELLHS KHSHPLDSNQTSJVLRFVLEQYNAISLWLTCDPATQDRRSCLPIHFVVLNQLYNFIMNNL
5370	1226	716	RWSRKLELRRAAQATESRPPQSQEMHPPTGKEVHALKRLRDSAN ANDVETVQQLLEDGADPCAADDKGRTALHFASCNGNDQIVQLL DHGADPNQRDGGLGNTPLHLAACTNHVPVITTLRGGARVDAEADR AGRTPLHLAKSKLNILQEDEHAQCLKAVR/HGEADHPYABGVSG APRAT*AACSGVFPSPSRWLGSAPWSRSSCTIWSLPLHEAKCR AVRPLSSAAQGSAPSSSSCCTVSTSLLAESLSSLFRACTSLPVGCISWL
5371	1331	167	IAAMLWKLLRSQSCRCLCSFRKMRSPPKYRPFLACFTYTTDKQS SKENTRTVEKLYKCSVDIRKIRR*KDGYF*RMKPMKLLRI/F LQELGADETAVASILERCPEAIVCSPTAVNTQRKLWQLVCKNEE ELIKLIEQFFPESFTTIKDQENQKLNVQFFQFLGLKVNVIISRLLT AAPNVFHNPVEKNKQMVRLQESYLDVGGSEANMKVWLLKLLSQ NPILLNSPTAIKETLEFLQEQGFTSFEILQLLSKLKGFPLQLC PRSIQNSISFSKNAFKCTDHDLKQLVLKCPALLYSSVPVLEERM QGLLREGISIAQIRETPMVELETPQIVCYRKLNLSSGYRIKDG HLANLNGSKKEFEANFGKIQAKKVRPLFNPVAPLNVEE
5372	51	857	SPGAQFLWAAPMDPDPFLSAVQGKDEILHKALCFCPWLKGGMEMPLLILLFVTELSGAGHNTTVFQGVAGQSLQVSCPYDSMKHWGR RKAWCRLQGEKGPCQRVVSTHNLWLLSFLRRWNGSTAITDDTLG GTLTITLRNLQPHDAGLYQCQSLHGSEADTLRKVLVETLADPLD HRDAGDLWFPG\DLRASRMPMWSTASPGASWEKSPSHPLPSFS SWPASFSSRF*QPAPSGLQPGMDRSQGHIIHPVNWTVAMTQGISS KLCQG
5373	2814	346	VKKTKSIFNSAMQEMEVYVENIRRKFGVFNYSFRTPYTPNSQY QMLLDPTNPSAGTAKIDKQEKVKLNFDMTASPKILMSKPVLSSGG TGRRIISLSDMPRSPMSTNSSVHTGSDVEQDAEKKATSSHFSASE ESMDFLDKSTASPASTKTQAGSLSGSPKFSPOLSAPIITKTD KTSTTGSILNLNLDRSKAEMDLKELSESVQQQSTPVPLISPKRQ IRSRFQLNLQDKTIESCKAQLGINEISESDVYTAVEHSDSEDSEKS DSSDSEYISDDEQKS*GTSQEDTEDKEGQMDKEPSAVKKPKP TNPVEIKEELKSTSPASEKADPQAVDKASPEPEKDFSGAKAPS PHPIKDKLKGKDETDSPTVHLLGDDSDSE\NELLVIDGEDHSGRE GRKNKKEPKEPSPKQDVVGKTPSTTVGSHSPETPVLTTRSSAQ TSAAGATATTSTSSTVTVTAPAPAATGSPVVKQRPLL,PKE\TAP AVQRSCGTSSTVQQKEITQSPSTSTITLVTSTQSSPLVTSSGSM STLVSSVNGDLPIGTASADVAADIAYKTSKL\MDA1KGTM\TEI YNDSLKN\TTWKAQLAEDSQGLRIEIEKLQWLHQQEL\SEMKNH LELTMADMRSQSWEQRDRLLIAEVKKQLEKQQAVDETKKQWC ANFKKEAIFYCCWNTSYCDYPCQ\QAHWPEH\MKSCTQSATAPQ \QEADAE\VNTEETLNKSSQGSSSSSTOSAPSETASA\SKBKETSA EKSKESGSTLDLGSRETPTSSILLGSNQGSDHSP\SNKSSWSS DEKRGS\TRSDHN\TPSTQHGRSLLPGKESRAGTPFLGT\SK
5374	2814	346	VKKTKSIFNSAMQEMEVYVENIRRKFGVFNYSFRTPYTPNSQY QMLLDPTNPSAGTAKIDKQEKVKLNFDMTASPKILMSKPVLSSGG TGRRIISLSDMPRSPMSTNSSVHTGSDVEQDAEKKATSSHFSASE ESMDFLDKSTASPASTKTQAGSLSGSPKFSPOLSAPIITKTD KTSTTGSILNLNLDRSKAEMDLKELSESVQQQSTPVPLISPKRQ IRSRFQLNLQDKTIESCKAQLGINEISESDVYTAVEHSDSEDSEKS DSSDSEYISDDEQKS*GTSQEDTEDKEGQMDKEPSAVKKPKP

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			TNPVEIKKEELKSTSPASEKADPGAVKDOKASPEPEKFSGKAKPS PHPIKDKLKCKDETDSPVTVLGLDSDSE\NELVIDLGEDHSGRE GRKNKKEPEPSPKQDVVGKTPPTTVGSHSPPETPVLTRESSAQ TSAAGATATTSTSTVTVTAPAPAATGSPVKQRPLLPKE\tAP AVQRSCGTTSVQOKEITOSPSTSTITVLTSTQSSPLVTSSGSM STLVSSVNGDLP\IGTASADVAADIAKYTSKL\MDAIKGTM\TEI YNDSLKV\TTWKAQLAEQSQGLRIEIEKLQLWLHQQEL\SEMKN LELTMAEMRQSWEQERDRLLIAEVKKQLEKQQAVDETKKQWC ANFKKEAIFYCCWNTSYCDYPCQ\QAHWPEH\MKSCCTQSATAPQ \QEADAE\VNTETLNKNSSQGSSSSTQSAPSETASA\SKEKETSA EKSKEGSTLDSGSRETPTSSILLGSNQGSDHSR\SNKSSWSSS DEKRGS\TRSDHN\TPSTQHGRSLLPKGESRAGTPFLGTSK
5375	2907	1116	HIFLAEEEPMLERCRGPIAMGPAQPRLLSGPSQESPQTIGKES RGLRQQGTSVVA\QSGAQAPGRAHRCAHCCRHPGWVA\LWLHTR RCQA\RGLFLPLCPCECGRRFRHAPFLALHRQVHAAATPDWGFA LCGQSFRCGVVALVHLRAHSAAKAGPFACPKMARDAFWRKAA SSILRRCHPSRPRGPRPFICGNCRSILPTWDQ\LKVAHKRVHV SRRP\ERGPPAKVFWGPGRGPPTGDTPPGGDAVDRP\QCA CCGKRFRHK\PNLIRSHAACTSGERPHQ\CSRECG\KRFNPKY LTS\HRRITHTARQPYPCKECGRRFRHKPNLLSHSKIHKRSEGS AQAAAPGPSPQLPAGPQESAAEPTPAVPLKPAQEPPPGAPPEHP QDPPIEAPPSPSYSCDDCGRSFRLERFLRAHQRTGERPFTCAEC GKNFGKKTHLVAHSRVHSGERPFRLARKCGRFLPRASQSGGRN SAEPNAPRFGFPVCDCGKAFRHKPYLAHRIATPAEKPYVCP DCRKAFAQSNSNL\VSHRRHTGERPYACPDCRSFSQKSNLITH RKSHI RDGAFCACI CGQT FDD DEERLLA HQKKHDV
5376	4504	591	VSTFSCLWPAGGGGRGRVSNMAQSKRHVYSRTPSGSRMSAEAS ARPLRVGSRVEVIGKGHRGTIVAYVGATLFATGKVNVGVLDEAKG KNDGTQGRKYFTCDEGHGIVFVRQSQIQVFEQDGADTTSPETPDS SASKVLKREGTDTAKTSKLRLCPKKAFTARKTTTRRKPTRP ASTGVAGASSSLGPSSGSAGSAGLSSSEPSPTPAQTPLAAPIPTP VLTSPGAVPPLPSPSKEEEGLRQAQVRLDEEKLTLRLKRAEDKA KLKELEKHKIQLEQVQEWKSKMQEQQADLQRLKLEARKEAKEAL EAKERYMEEADTADAIEMATLDKEMAERAESLQQEVEALKER VDELTTDLEILKAEIEKGSDGAASSYQLKOLEEQNARLKDALV RMRDLSSEKQEHVK\LQKLMEEKNQLEVVRRQQRELQGEELSQ AESTIDELKEQVDAALGAEEMVEMLTDRNLNLEEKVRELRETVG DLEAMNEMNDELQENARETELELRQEDLDMAGARVREAQKRVEAA QETVADYQQTIKKYRQLTAHQDVNRQELTNQQEASVERQQQPPP ETFDFFKIKFAETKAHAKAIEMLRQMVEQAQANRHMSLLTAFMPD SFLRPGGDHDCVLVLLMLPRLLICKAELIRKQAEKFELSENCE RPGLRGAAGEQLSFAAIGLVY\SLMPAAGHRYHRY*CHALSQCR LD\VYKKVGSLYPMPEMSAHERSLDFIELLHKDQLDETVNVEPLT KAIKKYOHLYSIHLAEQPEDCTMOLADHIFTQSAJDCMSVEVG RLRAFLQGGQEATDIALLLRDLETSCS\DIRQFCKKIRRRMPGT DAPGI PAALAFGPQVS DTLDCRKHLTVVAVLQEVAAAAQLI APLAENEGLLVAALEELAFLKASEQIYGTSSSPYECLRQSCNIL ISTMNK\LVTAMQEGEYDAERPPSKPPP\VELRAAALRAEITDA EGLGLKLEDRETVKELKKSLSKIKGEELSEANVRITLLEKKLDS AAKDADEIEKVQTRLEETQALLRKEKEFFETMDALQADIDQL EAEKAELKQRLNSQS KRTIEGLRGPPPSGIATLVSIGEQQR GAIPGQAPGSPVPGPGLVKDSSLQQLQISAMRLKHSIQLQHENSIL KGAQMKA LASLSPPLHVAKLSHEGPGSEL PAGALYRKTSQLLET LNQLSTHTHVVVDITRTSPEAKSPSAQLMEQVAQLKSLSDTVEKL KDEVLKETVSQRPGATVPTDFATFPSSAFLRAKEEEQQDDTVYMG KVTFSAAQFGQRHRLVLTQEQLHQLHSRLIS
5377	762	1106	DVPCKRVLPAEAQEQKGQLTLSGESGEQG\F*YHEVRAEGES* /WFGPNVRLVHTQLKTKKPSGTLKAKFY\HTGSTKFAARISCTK SS*WPGYDGWWGGYQYIFI FRGMRWEEQP
5378	2009	664	QASGTTLRLPDLPLQLKREATSRNRALKPRGRILVLMTSCLPAL RFIATPRLSAMPHIDNDVKLDFKDVLRLPKRSTLKSREVDLTR

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			SFSFRNSKQTYSGVPIIAANMDVTGTFEMAKVLCKS*VPGSFWD VPQMGCVFLIYKLFTLKWKMLLSSVLLPASILVAEKFSLFTAVH KHYSLVQWQEFAGQNPDCLERHLAAASSGTGSSDFEQLEQILEAIP QVKYICLDVANGYSEHFVEFVVDVRKRFQHTIMAGNVVVTGEMV EELILSGADIJKVGIGPGSVCTRKKTGVGYPQLSAVMECADA A HGLKGHIISDGGCSCP GDPVAKAFGAGADFVMLGGMLAGHSES GG ELIERDGKKYKLFGYGMSS*I\AM\KKYAGGVAEYRASEGKTVEV PFKGDVEHTIRDILGGIRSTCTYVGAAKLKE LSRRTT FIRVTQQ VNPIFSEAC
5379	2009	664	QASGTTLRPLPDLPQLKRREATSRNRALKPRGRLLVLMTSCLPAL RFIATPRLSAMPHIDNDVKLDVKDVLRLPKRSTLKSRS EVDLTR SF SFRNSKQTYSGVPIIAANMDVTGTFEMAKVLCKS*VPGSFWD VPQMGCVFLIYKLFTLKWKMLLSSVLLPASILVAEKFSLFTAVH KHYSLVQWQEFAGQNPDCLERHLAAASSGTGSSDFEQLEQILEAIP QVKYICLDVANGYSEHFVEFVVDVRKRFQHTIMAGNVVVTGEMV EELILSGADIJKVGIGPGSVCTRKKTGVGYPQLSAVMECADA A HGLKGHIISDGGCSCP GDPVAKAFGAGADFVMLGGMLAGHSES GG ELIERDGKKYKLFGYGMSS*I\AM\KKYAGGVAEYRASEGKTVEV PFKGDVEHTIRDILGGIRSTCTYVGAAKLKE LSRRTT FIRVTQQ VNPIFSEAC
5380	2	2050	PSRAGGAERGRAAAARSPGGSAAGWECPSVLD EAGACTMSSCVS SQPSSNRAAPQD ELLGGRGSSSSSESQKPCEALRGLSSLSIHLGME SFIVVTECEPGCAVDLGLARDRPLEADGQEVP LDTSGSQARPHL SGRKLQLQERSQGGLAAGGSLLDMNGRCICPSPLYSPVSSPQSSP RLPRRPTVESHHSITGMQDCVQLNQYTLKDEIGKGGSYGVVKLA YNENDNTYYAMKVLSKKKLIRQAAFPRRPPRGTRPAPGGCIQP RGPI\EQVYQEIA\ILKKLDHNPNVV\KLVEVL\DDPNEDHLYMV F\ELVNQGPVMEVPTLKPLSEDQARFYFQDLIKGIEYLHYKII H\RDIKPSNLLVGEDGHKIADFGVSNEFKGSDALLSNTVGT PA FMAPESLSETRKIFSGKALDWAMGVTLYCFVFG*CPFMDERIM CLHSKIKSQALEFPDQPDIAE DLKDLITRMIDKNPESRIVVPEI KLHPWVTRHGAEPPLPSEDENCTLVEVTEEEEVENSVKHIPS LATV ILVKTMRKRSFGNPFEGRSREERLSAPGNLLTKKPTRECESL SELKT*KISPLPACCKV*T*EFFHPGCRPSCWOPPFLLTHSQPR *PEPPRTDEALCPYETGRTCWA PLLQVILWWVGTPLPFLSTSWL PDLVGAPGSHFCFLNIALLRYNSHTM
5381	2	2050	PSRAGGAERGRAAAARSPGGSAAGWECPSVLD EAGACTMSSCVS SQPSSNRAAPQD ELLGGRGSSSSSESQKPCEALRGLSSLSIHLGME SFIVVTECEPGCAVDLGLARDRPLEADGQEVP LDTSGSQARPHL SGRKLQLQERSQGGLAAGGSLLDMNGRCICPSPLYSPVSSPQSSP RLPRRPTVESHHSITGMQDCVQLNQYTLKDEIGKGGSYGVVKLA YNENDNTYYAMKVLSKKKLIRQAAFPRRPPRGTRPAPGGCIQP RGPI\EQVYQEIA\ILKKLDHNPNVV\KLVEVL\DDPNEDHLYMV F\ELVNQGPVMEVPTLKPLSEDQARFYFQDLIKGIEYLHYKII H\RDIKPSNLLVGEDGHKIADFGVSNEFKGSDALLSNTVGT PA FMAPESLSETRKIFSGKALDWAMGVTLYCFVFG*CPFMDERIM CLHSKIKSQALEFPDQPDIAE DLKDLITRMIDKNPESRIVVPEI KLHPWVTRHGAEPPLPSEDENCTLVEVTEEEEVENSVKHIPS LATV ILVKTMRKRSFGNPFEGRSREERLSAPGNLLTKKPTRECESL SELKT*KISPLPACCKV*T*EFFHPGCRPSCWOPPFLLTHSQPR *PEPPRTDEALCPYETGRTCWA PLLQVILWWVGTPLPFLSTSWL PDLVGAPGSHFCFLNIALLRYNSHTM.
5382	1536	203	GARGSQQDAPALQEAEVRGPERAQPARGRMTKARLFRLWLVI GS VFMILLITIVWDSAGAAHFLHTSFSRPTHGPPPLPTCGFD RDRE LTADSDVDEFLDKFLSAGVKQS DLPRKETEQQPAPGSMEESVRG YDWSPRDARRSPDQGRQQAERRSVLRGFCANSSLAFPTKERFD DIPNSELSHLIVDDDRHGAICYVPKVACTNWKRVMIVLSSGL LH RGAPYRDP LRIPREHVHNASAHLTFNKFWR RY GKL SRH LM KVKL KKYTKFLFVRDPFVRLISA FRSKF ELENEEF/* PQVRR AHA AV RQPHQPARLIGARGLPRWPQ\VS FANFIQVLLDPHTEKLA FNEH WRQVYRLCHPCQIDYDFVGKLETLD EAAQQLQ LQV DLAAPL P

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			PELPGTGPSSWEEDWFAKIPLAWRQQLYKLYEADFVLFGYPKP ENLLRD
5383	45	5250	VERLLGCRNSKRITWRMLISKNMPWRLNQGISFGMYSAAELKKLS VKSITNPRLDSLGNPSANGLYDLALGPADSKEVCSTCVQDFSN CSGHLGHIELPLIVYNNPLLFDKLYLLLRGSCLNCHMLTCPRAVI HLLLQLRLVLEVGALQAVYELERILSRFLEENADPSASIREEL EQYTEIEVQNNLLGSQGAHVKNVCESKSKLIALFWKAHMNAKRC PHCKTGRSVVRKEHNSKLITITPAMVHRTAGQKDSEPLGIEEAQ IGKRYGLPTTSAREHLSALWKNEGFFLNYLPSGMDDDGMSRFN PSVFFLDFLVVPPSRSRPVSRLGDQMFTNGQTVNLLQAVMKDVVL IRKLALMAQEOKLPPEEVATPTTDEEKDSLIAIDRSPLSTLPGQ SLIDKLYNIWIRLQSHVNIVFDSEMDKLMMDKYPGIRQILEKKE GLFRKHMMGKRVDYAARSVICPDHYINTNEIIGIPMVFATKLTYPE QPVTWPNVQELROAVINGPNVHPGASMVINEDGSRTALSADMT OREAVAKQLIUTPATGAPKPGTICKVCRHVKNGDILLRNQPTLH RPSIQAHARIILPEEKVLRHYANCKAYNADFQDEMNAHFPOS ELGRAEAYVLAQTDQQYLVPKDQPLAGLIQDQDHMVSGASMTTRG CFFTREHYMBLVYRGTLTKVGRVKLLSPSILKPFPLWIKQVVS TLLINIIPEDHIPLNLSGKAKITGKAWVKETPRSVPGPNFDSMC ESQVIIREGELLCGVLDKAHYGSSAYGLVHCCYEIYGETSGKV LTCLARLFATTYIQLYRGFTLGVEDILVKPKADVKRQRRIIEESTH CGPQAVRAALNLPPEASYDEVRGKWQDAHLGKDQRDFNMIDLKF KEEVNHYSNEINKACMPFGLHRQFPENTLQLMVQSGAKGSTVNT MQISCIUHQTELEGRTSTPLMASGKSLPCFEPYEFTPRAGGFVTG RFLTGIKPPEFFFHCMAGREGLVDTAVKTCSRSGYLORCIIKHLE GLVVQYDLTVRDSGSVVQFLYGEDGLDIPKTQFLQPKQFPFLA SNYEVIMKSQHLHEVLSRADPKALKHHFRAIKKWKQSKHPTNLLR RGAFLSYSQKIQEAVKALKLESENRRN/ /RPWDS/G/RMLRMWY ELDEESRKRKYQKAAACPDPSLSPVWRPDIYFASVSETFETKVDD YSQEWAAQTEKSYEKSELSLDRLRTLQI\KWRQSLCEPGEAVG LLAAQSIGEPSTQMTLNTFH-FAGRGE MNVFLGIPRLREILMVAS ANIKTPMMSPVVLNTKKALKRVKVSLKKQLTRVCLGEVLQKIDVQ ESFCMEEKQNKFQVYQLRFQFLPHAYYQQEKCLRPEDILRFMET RFFKLLMESIKKKNNKASAFRVNTRRATQRDLDNAELGRSRG EQEGDEEEBCHIVDAEAEFGDADASDAKKEKQEEEVDYSEE EREGEREENNDEDMQEERNPHREGARKTQEQQDEEVGL/GH*GGPV PSRPDAAPETHPQPGAPGA\EAMERRVOAVREIHFPIDDYQYD TEESIWCQVTVKLPLMKINFDMSSLVVS LAH GAVIYATKGITRC LLNETTMNKNEKELVLTNTEGINLPELFKYAEVLDLRLYNSNDI AIANTYGEAALRVISKEIKDVF AVVGI A VDP RHLISL VAD YMCF EGVYKPLNRFGIRSNSSSPLQOMTFETS FQFLKQATMLGSHDEL SPSACLVVGKVVRRGGTGLFELKQPLR
5384	196	886	QSCGQRLPTVL*L\GPGSCPCILSLF\PGRPHALPEIRPYINI TILKGDKGDPGPMGLPGYMGREGPQGEPPGPGQGSKGDKGEMGSPG APCQKRRFAFSVGRKTALHSGEDFQTLLFERVFNVLGCFDMAT GOFAAPLRGIIYFFSLNVHNSWNYKETYVHIMHNQKEAVILYAQPS ERSIMQSOSVMLDLAYGDRVWVRLFKRQRENAIYSNDFDTYITF SGHЛИАЕДД
5385	326	799	LMVPRTKKEAPAPPKAEAKAKAL\KAKKAVLKDVKSHKKNIHM SPTFRRPKTL*LRQPKYPWKSTPRRNKLDHIVIIFPLTTB*A VKKIEENNSSLVFTVDVKANKHQIKQAVKK/LCDIDVAKVNTLQ SDGERKAYVRLAPDYDALVVATKIGIT
5386	326	799	LMVPRTKKEAPAPPKAEAKAKAL\KAKKAVLKDVKSHKKNIHM SPTFRRPKTL*LRQPKYPWKSTPRRNKLDHIVIIFPLTTB*A VKKIEENNSSLVFTVDVKANKHQIKQAVKK/LCDIDVAKVNTLQ SDGERKAYVRLAPDYDALVVATKIGIT
5387	2	2117	FVVAASGGCWVFLCERRAGSLLSAS YGT FAMP GMVLFG RRWAIA SDDL VFP GFF FELV VRV LNWIG IIL TLYLMH RGK LDC AGG AL SSY LIVL MIL LAV VICT VS AIM CV S M R GT ICN PG PRK S MS KLL YIRL AL FFPEM VWA SLGA AWV ADGV QCD RTV VNG IIA T VV VSW II AA TVV SII IV FD PL GGK MAP YSSA G PSH LD SH DS QL NL KTA AT

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			SVWETRIKLLCCCIGKDDHTRVAFSSTAELFSTYFSDTDLVPSDIAAGLALLHQQQDNIRNNQEPQAVVCHAPGSSQEADILDAELKNCHHYMQFAAAAYGPPLYIYRNPLTGLCRIGGCCRSKNPQMTM/MVGGDQLQL/CTSAPILHTRAAVQGLHPQLPWTRFTELPFLVALDHRKEVVVAVRGTMSSLQDVITDLSAESEVLDVECEVQDRLAHKGISOAARYVYVQLINDGILSQAFLAYPEYRLVIVGHSLGGAAALLATMVRAAYPVQVRCYAFSPRGLWSKALQEYSQSIVSLVLGKDVIPIRLSVNLEDLKRRIILRVVAHCNKPKYKILLHGLWYELFGGNPNNLPTEDGGDQEVLTQPLGEQSLLTRWSPAYSFSDDSPLDSSPKYPPLYPGRIIHLQEEGASGRFGCCSAAHYSAKWSHEAEFSKILIGPKMLTDHMPDILMRALDSVSDRAACVSCPAQGVSSDVAA
5388	1569	753	TADGGAGGGGRRQAGVRRHYLYPFTGGYRRRAACOAERPAARSKDTDLAAYQKGNLGVQLRNMAQETNHSQVPMLCSTGCGFYGNPRTNGMCSCVYKEHLQRQNNSNGRISPPVQCTDGSVPEAQSAIDSTSMMQPSPVSNQSSLSESVASSQOLDSTSVDKAVPETEDVQASVSDTAQQPSEEQSKSL\NMRNKKRIAVSCAGRKWDLGLLNAGVEMFTVYVTQMYTIALTITKQMLKNFVFQQEFSFGSFHQQLLEYKILEHLOTKN
5389	1569	753	TADGGAGGGGRRQAGVRRHYLYPFTGGYRRRAACOAERPAARSKDTDLAAYQKGNLGVQLRNMAQETNHSQVPMLCSTGCGFYGNPRTNGMCSCVYKEHLQRQNNSNGRISPPVQCTDGSVPEAQSAIDSTSMMQPSPVSNQSSLSESVASSQOLDSTSVDKAVPETEDVQASVSDTAQQPSEEQSKSL\NMRNKKRIAVSCAGRKWDLGLLNAGVEMFTVYVTQMYTIALTITKQMLKNFVFQQEFSFGSFHQQLLEYKILEHLOTKN
5390	217	1332	EDPRKILMEDKMWSECEGPEMSLVCILTDQAHAREQLSKSTRDFIEGGADDTSRDDNIAAFKIRIIRLPRYLRLDVSEVDTRTTIQGEEISAPICIAPTGFHCLVWPDEGMSTARAAQAA\GICYITSTFASCSDLIEDIVIAPEGLRLWVYVHPDQLNKLQLIQRVESLGFKALVITLDTPVCGNRRHDIRNQLRRNLTLDLQSPKKGNAIPYFQMTPIS TSLCWNDLFWQSITRLPIILKGILTLKEDAEALAVKHNVQGIIVSNHGGQLDEVLASIDALTEVVAAVKGKIEVYLDGGVRTGNDVLKALALGAKCIFLGDAILWALASKGBHGVKEVNLIL\NEFHTSMA\LTGCRVAEINRNLVQFSRL
5391	1	1292	VKKAGRSGRPPTAGGQRCCEAAGPTVMMERRLGVRRAWVKENRGSQPPVCKNLMIQEQLKVMFVGPNTRKDYHIEEGEEVFYQLEGDMVLRVLEQGKHRDVVIQGBEFLPLPARVPHSPQRFANTVGLVVERRRLETDGLRYYGDTMDVLFEKWFYCKDLGTOLAPIIIOEFFSSEQYRTGKPIPDQLLKEPPFLPLSTRSIMPEMSLDAWLDSHRELQAGTPLSLFQGDTYETQVIAYGQGSSEGRLRQNVDVWLWQLEGSSVVTMGGRELSLGPWMDSLVLSWGPSY\AW\ERTQGSVALSVT\QDPACKKSPWGEPSCHGLKAATGPSTLEVPSLPPNNSPSPHYLSVYCRCVPHRPAHCCHPPSCPSQPRCAGPRAAPHLLWQTQPTALPVLPGGLPPAPLLPILPLSLOTCSTTPRRPSIKAS
5392	1	1623	IRGSNAQKVVGASCSGGAGPQPDPAGPGGVPAALAAVLGACEPRCAAPCPPLPALSRCSRAGSGRSRGSGRAAGSGAAAAEWIRKGSFIHKPAHGWLHPDARVLGPVGVSYVVRVYMGCIEVLRSMRSLDFNTRTQVTTREAINRLHEAVPGVRGSWKKKAPNKAALASVLGKSNLRFAGMSISIHISTDCLSLSVPATRQVIANHMPMSISFASGGDTDMTDYVAYAKDPINQRACHILECCEGL\AQSIISTVGQAFELRFKQYIHSPPKVALPPERLAGPEESAWGDEEDSLEHNYINSIPGKEPPLGGLVDLSRALTQPCALTALDQGPSPSLRDACSLPWDVGSTGTAPPGDGYQADARGPPDHEEHLVNTQGLDAPEPEDSPKKDLFDMPFEDALKLHECSVAAVPLPLEDQWPSPPTRRAPVAPTEEQLRQEPMWYHGRMSRAAERMLRADGDFLVRDSTNPQGYVLTGMHAGQPKHLLLVDPPEGVVRTKDVLFLESISHLIDHHLQNGQPIVAAESELHILRGVVSREP
5393	2	982	GGDSAGMTMETQMSQNVCPRNLWLLQPLTVLILLASADSQAAAPPKAVLKLEPPWINVLIQ\EDSVTILTCQGAPQP/EREDS1QWFHNG

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			\NLIPTHTQPS\YRFKANNN\DSGEYTCQTGQTS\SDPVHLTV LSEWLVLTQTPHLEFQEGETIMLRCHS\WRDKP\LVKVTFFQNGK SQKFSLDPTFSIPQANHSHSGDYHCTGNIGYTLFSSKPVII QVPSMGSSSPMGIVAVVIATAVAAIAVAVVALIYCRKKRISAN STDPVKAAQFEPPGRQMTAIRKRQLEETNNNDYETADGGYMTLN RAPTDDDKNIIYLTLPPNDHVNSNN
5394	2	982	GGDSAGMTMETQMSQNVCPRNLWLLQPLTVLLLASADSQAAAP PKAVLKLEPPWINVLQ\EDSVTILTCQGAPQP\ERSDSIQWFHNG \NLIPTHTQPS\YRFKANNN\DSGEYTCQTGQTS\SDPVHLTV LSEWLVLTQTPHLEFQEGETIMLRCHS\WRDKP\LVKVTFFQNGK SQKFSLDPTFSIPQANHSHSGDYHCTGNIGYTLFSSKPVII QVPSMGSSSPMGIVAVVIATAVAAIAVAVVALIYCRKKRISAN STDPVKAAQFEPPGRQMTAIRKRQLEETNNNDYETADGGYMTLN RAPTDDDKNIIYLTLPPNDHVNSNN
5395	3135	531	RASDAKNQEGLLNTRRKSTDSPVPISKSTLSRSLSLQASDFDGAS SSGNPEAVALAPDAYSTGSSSASSTLKRTPRPPSLKKQTTK KPTETPPVKETOOPDEESLVPGENLASETKTESAKTEGPPSA LLEETPLEPAAGPKAACPLDSESVEGVPPASGGGRVQNSPPVG RKTLPITTAPEAGEVTPSDSGGQEDSPAKGHSVRLFEDYSEDKS SWDNQQENPPPTKIGKKPVAKMPLRRPKMKTPKEKLDNTPASP PRSPAEPNDIPIAKGTYTFDIDKWDDPNFNPFSSSTSkmQESPKL PQQSYNFDPTCDESVDPFKTSKTPSSPSKSPASFEIPASAME ANGVDGDGLNKPAKKKTPLKTDTFRVKKSPRSPLSDPPSQDP TPAATPETPPVISAVVHATDEEKLAUTNQKWTCTMVDLEADKQD YQPQPSDLSTFVNETKFSSPTEELDYRNYSYEIEYMEKIGSSLQPD DDAPKKQALYLMFDTSQESPVKSSPVRMSESPTPCGSSFEETE ALVNNTAAKNQHPVPRGLAPNQESHLQVPEKSSQKELEAMGLGTP SEAIEITAPEGSFASADALLSRLAHPVSLCGALDYLEPDLAEKN PPLFAOKLOREAAPTDVSISKITALYSRIGTAEVEKPGAGLFFQO PDLDLSQLQIARAEITKEREVSEWDKYEEESREVMEMRKIVAE YEKTIAQMIEDEQREKSVS\HQTQQLVLEKEQA\LADLNSVEK \SLADLFRRYEKMKEVLEGFRKNEEVLRCAQEYLSRVKKEEQR YQALKVHA\EEKLDRAANE\IAQVRGKAQQEQAHHQSALERA CRV\DALERTLEQKNKEIEELTKICDELIAMGKS
5396	3135	531	RASDAKNQEGLLNTRRKSTDSPVPISKSTLSRSLSLQASDFDGAS SSGNPEAVALAPDAYSTGSSSASSTLKRTPRPPSLKKQTTK KPTETPPVKETOOPDEESLVPGENLASETKTESAKTEGPPSA LLEETPLEPAAGPKAACPLDSESVEGVPPASGGGRVQNSPPVG RKTLPITTAPEAGEVTPSDSGGQEDSPAKGHSVRLFEDYSEDKS SWDNQQENPPPTKIGKKPVAKMPLRRPKMKTPKEKLDNTPASP PRSPAEPNDIPIAKGTYTFDIDKWDDPNFNPFSSSTSkmQESPKL PQQSYNFDPTCDESVDPFKTSKTPSSPSKSPASFEIPASAME ANGVDGDGLNKPAKKKTPLKTDTFRVKKSPRSPLSDPPSQDP TPAATPETPPVISAVVHATDEEKLAUTNQKWTCTMVDLEADKQD YQPQPSDLSTFVNETKFSSPTEELDYRNYSYEIEYMEKIGSSLQPD DDAPKKQALYLMFDTSQESPVKSSPVRMSESPTPCGSSFEETE ALVNNTAAKNQHPVPRGLAPNQESHLQVPEKSSQKELEAMGLGTP SEAIEITAPEGSFASADALLSRLAHPVSLCGALDYLEPDLAEKN PPLFAOKLOREAAPTDVSISKITALYSRIGTAEVEKPGAGLFFQO PDLDLSQLQIARAEITKEREVSEWDKYEEESREVMEMRKIVAE YEKTIAQMIEDEQREKSVS\HQTQQLVLEKEQA\LADLNSVEK \SLADLFRRYEKMKEVLEGFRKNEEVLRCAQEYLSRVKKEEQR YQALKVHA\EEKLDRAANE\IAQVRGKAQQEQAHHQSALERA CRV\DALERTLEQKNKEIEELTKICDELIAMGKS
5397	3135	531	RASDAKNQEGLLNTRRKSTDSPVPISKSTLSRSLSLQASDFDGAS SSGNPEAVALAPDAYSTGSSSASSTLKRTPRPPSLKKQTTK KPTETPPVKETOOPDEESLVPGENLASETKTESAKTEGPPSA LLEETPLEPAAGPKAACPLDSESVEGVPPASGGGRVQNSPPVG RKTLPITTAPEAGEVTPSDSGGQEDSPAKGHSVRLFEDYSEDKS SWDNQQENPPPTKIGKKPVAKMPLRRPKMKTPKEKLDNTPASP PRSPAEPNDIPIAKGTYTFDIDKWDDPNFNPFSSSTSkmQESPKL

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			PQQSYNFPDPTCDESVPFKTSSKTPSSPSKSPASFEIPASAME ANGVGDGLNPKAKKKTPLKTDTFVKKSPKRSPLDPPSQDP TPAATPETPPVISAVVHATDEEKLAVTNQKWTCTVTDLEADKDQD YQPQPSDLSTFVNTEKFSSPTEELDYRNSYEIEYMEKIGSSLQPD DDAPKKQALYLMFDTSQESPVKSSVVRMSESPTPCGSSFEETE ALVNTAAKNQHPVPRGLAPNQESHLQVPEKSSQKELEAMGLTP SEAIEITAPEGSFASADALLSLRAHPVSLCGALDYLEPDLAEKN PPLFAQKLQREAAHPTDVSISKALYSRIGHTAEVEKPAGLLFQQ PDLDLSALQIARAEITKEREVWEDKDYEEESRREVMMERKIVAE YEKTIAQMIEDEQREKSVS\HQTVQQLVLEKEQA\LADLNSVEK \SLADLFRRYEKMKBVLEGFRKNEEVLKRCAQFYLSRVKKEEQR YQAIKVHA\EEKIDRANAE\IAQVRGKAQQEQAAHQASLAERSS CRV\DALERTLEQKNKEIEELTKICDELIAKMGKS
5398	56	5426	SGEVCRMESNFQNQEGVPVPSVFSADP\ARPSEINFDGTKLDSL HEFLSVAPNTTEANSFESKDYLQVCLRIRPFTQSEKELESEGCVH ILDSQTIVVLKEFOCILGRLSEKSSG\OM\AQKPSFFPGFLGPAT TQKEFFQGCMH\VKDLLKGQSRSLIFTYGLTNSGKTYTFQGTE ENIRLPRTLNVLIFDSLQERLYTKMNLKPHRSREYLRLSSEQEK BEIASKSALLRQIKEVTVHNDSDDTLYGSLTNSLNISEFEESIK DYEQANLNMANSIKFVWVWSFFEYIYNEYIYDLFVPUVSSKFQKRK MLRLSQDVKGYSFIKDLQWIQVSDSKEAYRLLKLGIKHQSVFT KLNMASSRSHSIPTVVKILQIEDSEMSRVRVSELSLCDLAGSER TMKTQNEGERLRETGNINTSLLTGKCINVLNKSESKFQQHVP FRESKLTHYF\QSFNGKGKICMIVNISQCYLAYDETLNVLKFS AIAQKVCVPDTLNSSQEKLFGPVKSSQDVSLDSNSNSKILNVR ATISWENSLEDIMEDEDLVEELENAEETED\VGETKLLDEDLDK TLEENKAFISHEEKRLLLDIEDLKKKLINEKEKLTLFHKIRE EVTOEFTQYWAQRADFKETLQIWEREILEENAEERRLAIIFKDLVG KCDTREEAAKDICATKVETEEATACLELKFNQIKAELAKTKGEL IKTKEELKKRNENSDSLIQELETSNKKIITQNRRIKELINIIDQ KEDITINEFQNLKSHMENTFKCNMDKADTSSLIIINNKLCINETVBV PKDSKSKICSERKRVNENELQDDEPPAKGSIHVSSAITEQKK SEEVRPNIAEIEDIRVLQENNEGLRAFLLTIENELKNEKEEKAEL LNKOIVHFQOELSLSEKKNLITISKEVQQIQSNYDIAIAELHVQK SKNQEKEEIKMLSNEIETATRSITNNVSQ1KLMHTKIDEELRTL DSVSQISNIDLLNLRDLSNGNSDNLPNTQIDLLGNDYLVSKQV KEYRIQEPNRENFSHSSIEAIWECKEIVKASSKKSHQIEELEQ QIEKLQAEVKGYKDENNRLKEKEHNQDDLLKEKETLIOQLKBE LQEKNVTLDVQIQQHVEGKRALSELTQGVTCYKAKIKELETTILE TQKVERSHSAKLEQDILEKESIILKLERNLKEFQEHLDQDSVKNT KDLNVKELKLKEEITQLTNLNLQDMKHLLQLKEEEEETNRQETEK LKEELSASSARTON\LNADLQRKEEYADLKEKLTDACKQIKQV QKEVSVMRDEDKLRLRIKINELBKKKNQCSQELDMKQR\TIQQLK EQLINQKVEEAIQQYERACKDNLVKEKIIEDMRMTLEEQEOTOV EQDQVL\BAKLEEVERLATELDWRVVKCNDLETKNNQRSMKEHE NNNTDVLGKLTNLQDELQSEEQKYNADRKKWLFEKMMMLITQAKEA ENIRNKEMKKYABDRERFFKQNEMEILTAOLTEKDSDLQKWRERDQLVAALEIQLKALISSNVQKDNEIEQLKRIISETSKEIETQI MDIKPKRRISSADPDKLQTEPLSTSFEISRNKIEDGSVVLDSVKNSTENDOSTRFPKPELEIQTFLPLOPNKMAVHPGCTTPVTXIPK ARKRKSNEEMEDLVKCENTKKNATPRTNLKFPISSDRNSSVKKEQ KVAIRPSSKKTYSLRSQSASIIVGNLATKKGETLQKFGDFLQHS PSILQSKAKKIETMSSSKLSNVEASKENVSQPKRAKRKLYTSE ISSPIDISQVILMDQKMKESDHQI1KRRRLRTKTAK
5399	705	230	GPRMAKFLSQDQINEYKECFSLYDKQQRGKIKATDLMVAMRCLG ASPTPGEVQRHLQTHGIDGNGELDFSTFLTIMHMQIKQEDPKKE ILLAMLMVDKEKKGYVMASDLRSLKLTSLGKELTHKEV\DDLFR \ADIEPNGKVKYDEFIHKITSYLDGTY
5400	931	248	SHCSSGMEIPPTNYPASRAALVAQNYINYQQGTPHRVFEVQKVQ QASMEDIPGRGHKYRLKFAVEEIIQKQVKVNCTA3VLYPSTGQE TAPEVNFTFEGETGKNPDEEDNTFYQRLKSMKPLEAQNI\PDN

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			FGNVSPEMTTLVLHLAWVACGYIIWQNSTEDTWYKMWKIQTVKQVQRNDDFTILDYTILLHNIAQSIEIPWQMQLWHPQYGTKVKHNSRLPKEVQLE
5401	3	1360	TGWSYGPTTSLAFLAPRDFPPKLLIHPQAVVRLSCAGSMGSQAAEWRNWASWEGSSLSGCGCMCFKDDRIIVFWTMFSTYFMEKWAPRQDDMLFYVRRKLAYSGSESADGRKAEPPEVEVEVYRD SKKL,PGLGDPDIDWEESVCLNLILQKLDYMVTCAVCTRADCGDIHIHKKKSQQVVFASPSKHPMDSKGEESKISYPNIFMDSF\B\VFSDMTVGKGMVCVELVASDNTNFQGVIFQGSIRYEALKVVYDNRVSVAARMAQK\MSFGFSKYSNMEF\VR\MKGPQGKGHAEMA VSRVSTGDTSPCCTEEDSSPASPMHERVTSFSTPPTPERNNRPAFFSPSLKRKVPVRNRIAEMKKHSANDSEEFREDDGGADLNATNLRSRSLSGTGRSLVGSWLKLMRADGNFLLYAHLTYVTLPLHRI LTDILEVRQKPIMLT
5402	3445	1563	GECFIMAAVVQQNDLVFEFASNVMEDEQLGDPAIFPAVIVEHVPGADILNSYAGLACVEEPNDMITESSLDVAEEEIIDDDDDITLTVEASCHDGETIETIEAAEALLNMDSPGPMLDEKRINNNIFSSPEDDMVVAPVTHSVTLDGIPPEVMETQQVQEKYADSPGASSPEQPKRKGRKTKPPRPDSPATTNPNISVKKKNKGKGNТИYLWEFLL ALLQDKATCPKYIKWTQREKGIFKLVDSKPVSRLWRKHKNKP\DMNYEPMGRALEYQQRGILAKVEGQRLVYQFKEMPKDLYINDEDPSSIESSDPSLSSSATSNRQTSRSRVSSSPGVKGGAATVULKPGNSAAKPKDPVEVAQPSEVLRTVQPTQSPYPTQLFRTVHVVQPVQAVPEGEAARTSTMQDETTLNSSVQSIR\TIQAPTQVPPVVPSPRNQQ\LHTVTLQTVPLTTVIASTDPSAGTGSQKFILQAIPSSQPMTVLKENVMLQSQKAGSPPSIVLGPARV\QQVLTNSNVQTCNGTVSV\ASSPSFS\ATAPVVTFLLGSSLVLAHPPGTVITSVIKTQETKTLTQBEVKEKESEDHLKENTEKTEQQPQFYVMVVSSSNGFTSQVAMKQNELLEPNSF
5403	3445	1563	GECFIMAAVVQQNDLVFEFASNVMEDEQLGDPAIFPAVIVEHVPGADILNSYAGLACVEEPNDMITESSLDVAEEEIIDDDDDITLTVEASCHDGETIETIEAAEALLNMDSPGPMLDEKRINNNIFSSPEDDMVVAPVTHSVTLDGIPPEVMETQQVQEKYADSPGASSPEQPKRKGRKTKPPRPDSPATTNPNISVKKKNKGKGNТИYLWEFLL ALLQDKATCPKYIKWTQREKGIFKLVDSKPVSRLWRKHKNKP\DMNYEPMGRALEYQQRGILAKVEGQRLVYQFKEMPKDLYINDEDPSSIESSDPSLSSSATSNRQTSRSRVSSSPGVKGGAATVULKPGNSAAKPKDPVEVAQPSEVLRTVQPTQSPYPTQLFRTVHVVQPVQAVPEGEAARTSTMQDETTLNSSVQSIR\TIQAPTQVPPVVPSPRNQQ\LHTVTLQTVPLTTVIASTDPSAGTGSQKFILQAIPSSQPMTVLKENVMLQSQKAGSPPSIVLGPARV\QQVLTNSNVQTCNGTVSV\ASSPSFS\ATAPVVTFLLGSSLVLAHPPGTVITSVIKTQETKTLTQBEVKEKESEDHLKENTEKTEQQPQFYVMVVSSSNGFTSQVAMKQNELLEPNSF
5404	187	1111	LPVTLIFAKMKTQLSTLLLLLVLPLIKPAPPQQQDSRIIYDYGTDNFEEISIQSDYEDKYLDGKNIKEKETVIIIPNEKSLOLQKDEAITPLPLPKKENDEMPTCLLCVCLSGSVYCEEVVIDAVPLPKESAYLYARPNKIKKLT\AKDFADIPNLRRLDFTGNLIEDIEDGTFSKL SLVEELSLAENQLKLPLVPPKL\TLENAKYNKIKSRGIKANAFK KLNNTLFLYLDHNALESVPLNLPESI.RVIHLQFNNIASITDDTFCKANDTSYIRDRIEIRLEGNP\IVLGKHPNSFICLKRLPIGSYF
5405	2199	1220	QNSRSRSHMDPQNQHGSQSSLVVIQQPSLSDSRPRLDYEREIQPTA\ILSLDQIKAIRGSNEYTEGPSVVKRPAPRTAPRQEKHERTHEIIPINVNNYYEHRHTSHLGHAVLPSNARGPILSRSTSTGSAASSGS NSSASSEQGLLGRSPTRPVPGHRSERAIRTQPKQLIVDDLKGS LKEDLTQHKFICEQCGKCKGCECTAPRTLPSCLACNRQCLCSAE SMVEYGTMC\VKIGIYHCSNDDEGDSYSNDPCCSQSQSHCSR YLCMAGMSLFLPC\LLCYPPAKGCLKLCCRRCYDWHIRPGCRCKNSNTVYCKLESCPSRGQGKPS
5406	279	2732	RWRTYNVEGPLTFMDVAIEFCLEEWOCLDTAQONLYRNVMLENY

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			RNLVFLG//IAVSKPDLLTICLQEKEPWEPMRRHEMVAKPPVMCSHFTQDFWPEOHIKDPFQKATLRLYKNCEHNVNHLKKDHKSVDCKVHRGGYNGFNQCLPATQSKIFLFDKCVKAFHKFSNSNRHKISHTEKLFKCKECGKSFMLSHLAQHKIIHTRVNFCCKCEKGKAFNCPSIITKHKRINTGEKPYTCEECGVFNWSSRLTTTHKKNYTRYKLYKCEECGKAFNKSILTTKHIIIRTGEKFYCKECAKANQSSNLTEHKKIHPGEKPYKCEECGKAFNWPSTLTKHKRINTGEKPYTCEECGKAFNQFSNLTTTHKRINTA\EKFYKCTECGEAFSRS\SNLTKHKEIHTTEKKPYKCEECGKAFKWSSLTEHKLTHTGEKPYKCEKGKAFNCPSIITKHNRINTGEKPYTCEECGVFNWSSRLTTHKKNYTRYKLYKCEECGKAFNKSILTTKHIIHIEKKFYKCEECGKAFKWSKLTEHKIHTGEKPYKCEECGKAFNHFSILTKHKRINTGEKPYKCEECGKAFQTQSSNLTTHKKIHTGEKPYKCEECGKAFNQFSNLTKHIIHTEEKPYKCEECGKAFNQFSNLTTHKKIHTGEKPYKCEECGKAFNQFSNLTTHKNIHTGEKLYKPEDVTVLTTPTQESNIK
5407	3	659	RPRRRQSSCTGWLAGWLLRAAPRFCCRRTETDMEQGKGLAVLILAIILQLGTLAQSIKGHNHLVKVYDYQEDGSVILTCDAEAKNITWFKDGKMIQGLTEDKKKWNLGSNAKDPRGMYQCKGSQNKSQPLQVYRMCQNCIELNAATISGFLFAEIVSIFDLAVGVYFIAGTGMEFRQS\RASDKQTLPP\NDPAPTOPLKDPRKMTQYSHLQGN\QLRRN
5408	2745	6128	QGSKGTCHPQAQQPWDEGVWQEAPSQSEPWGQSQEPPTMPQRLPHARQHTPLPLGSADYRRVSVRPGPHRDPKDSRDAKREQGSLAPRPVPASRGGKTLCGYRQAPPGPPAQFORPICSASPPWASRFSTPCPGGAVREDTYPVGTQGVPSLALAQGGPQGSWRFLEWKSMPLRPTLDIGGPWFHYDFERSCWVRAISQEDQLATCWQAEHCGEVRNKDMSWPEEMSFIANSSKIDRHKVPTEKGATGLSNLGNTCFMNSSIQCVSNTQPLTQFISGRHLYELNRTNPICMKGHMAKYGDLVQELWSGTQKVNAPLKLWRWTIAKYAPRFNGFQQQDSQELLAFLLDGLHEDLNRVHEKPYVELKDSGRPDWEVAEAWDNHLLRRNRSIVVDFLHGQLRSQVKCCTCGHISVRFDPFNFLSLPLPMDSYMLEITVILDGTTPVRYGLRLNMDEKTYGLKKQLSDLGCLNBSQILLAEVHGSNIKNFQPDNQKVRLSVSGFLCAFEIPVVPVSPISASSPTQTDFSSSPSTNEMFTLTTNGDLPRIPIPNGMPTVVPGCTEKNFTGMVNGHMPSPMTGFTGIIIAVHRKMMRTELYFLSSQKNRPSLFGMPPLIVPCTVHTRKKDLYDAWIQVSRLASLPPQEASNHAQDCDDSMGYQYPFTLRRVQKDGNSCAWCPWYRFCRGCKIDCGEDRAFIGNAYIAVDWHPHTALHLRYQTQSERVVDEHESVEQSSRAQVEPINLDSLRAFTSEELGENEMYCSKCKTHCLATKKLDLWRLPPILIIHLKRQFVNGRWIKSKIVKFPRSFDESAFLVPRDPALCQHKPLTPQGDELSEPRILAREVKVDAQSSAGEEDVLLSKSPSSLSANIISSPKGSPSSSRKGSTSCPSSKNSSPRTLGRSKGRILRLPQIGSKNKLSSSKENLDASKENGAGQICELADALSRGHVLGGSQPELVTQPQDHEVALANGFLYHEACGNCCNGYSNGQLGNHSEEDSTDDQREDTRIKPIYNIYAIISCHSGILGGGHYVTYAKNPNCWKWYCNDSSCKELHPDEIDTSAYILFYEQQGIDYAQFLPTDGKKAIDTSSMDEDPESDY\EKCYCVO
5409	2745	6128	QGSKGTCHPQAQQPWDEGVWQEAPSQSEPWGQSQEPPTMPQRLPHARQHTPLPLGSADYRRVSVRPGPHRDPKDSRDAKREQGSLAPRPVPASRGGKTLCGYRQAPPGPPAQFORPICSASPPWASRFSTPCPGGAVREDTYPVGTQGVPSLALAQGGPQGSWRFLEWKSMPLRPTLDIGGPWFHYDFERSCWVRAISQEDQLATCWQAEHCGEVRNKDMSWPEEMSFIANSSKIDRHKVPTEKGATGLSNLGNTCFMNSSIQCVSNTQPLTQFISGRHLYELNRTNPICMKGHMAKYGDLVQELWSGTQKVNAPLKLWRWTIAKYAPRFNGFQQQDSQELLAFLLDGLHEDLNRVHEKPYVELKDSGRPDWEVAEAWDNHLLRRNRSIVVDFLHGQLRSQVKCCTCGHISVRFDPFNFLSLPLPMDSYMLEITVILDGTTPVRYGLRLNMDEKTYGLKKQLSDLGCLNBSQILLAEVHGSNIKNFQPDNQKVRLSVSGFLCAFEIPVVPVSPISASSP

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			TQTDFSSSPSTNEMFTLTTNGDLPBPIFIPNGMPNTVVP CGTEK NPTNGMVNHGMPSPDPSPTGYIIAVHRKMMRTELYFLSSQKNR PSLFGMPLIVPCTVHTRKKDLYDAWVIVQVSRLASPLPPQEASNH AQDCDDSMGYQYPFTLRLVVKQDKGNCAWCPWYRFCRGCKIDCGE DRAFTIGNAYIAVDWHPHTALHLRYQTSQERVVDEHESVEQSRAAQ VEPINLDSSLRAFTSEELGENEMYYCSKCKTHCLATKLLDLWR LPPILIIHLKRFQFVNGRWIKSQKIVKFPRSFDPASAFLVPRDP ALCQHKPLTPQGDELSEPRIAREVKKVDAQSSAGEEDVLLSKS PSSLSANLISSPKGSPSSSRKSGTSCPSSKNSSPNSSPRTLGRS KGRLRLPQIGSKNKLSSSKENLASKENGAGQICEADALSRGH VLGGSQPELVTPQDH EVALANGFLYEHACNGCGNGYSNGQLG NHSEEDSTDQREDTRIKPIYNLYAISCHSGILGGGHVITYAKN PNCKWYCNDSSCKELHPDEIDTDSAYILFYEQQGIDYAQFLPK TDGKMKMADTSSMDED FESDY\EKYCVLQ
5410	2	710	LRFPGQARHVWLARMQAPHKEHLYKLLVIGDLGVGKTSITIKRY VHQNFSIHYRATIGVDFALKVLHWDPETVVRQLQLNDIAGQERFG NMTRVYYREAMGAFIVFDVTRPATFEAVAKWKNDLDSLKSLSPNG KPVSVLLANKCDQGKDVLMMNNGLKMDQFCKEHGFVGFETSAK ENINIDEASRCLVKHILIANECDLMESIEPDVVKPHLTSTKVASC SG\CAKILVGTAGVW
5411	1302	289	TGPAAAGRRKALGSFGKPSPTVGLRAARRRTRPSAPAAPS VGC GKRRESDAGAGGERASVRTGSGRRGGRTMAGDSEQTQLQNHHQQPNN GGEPLFLIGVSGGTASGKSSVCAKIVQLLGQNEVDYRQKQVVLIS QDSFYRVLTSEQKAKALKGQFNFDHPDAFDNELILKTLKETEG KTVQIPVYDFVSHSRKEETVTVPADVVL.FEGILAFYQER\IR DLFQMQLFVDTDADTRLSRVLKD1SERGRDLEQI LSSSTLRFV KPA\ FEEFCLPPK\KYADVIIPR\GADN\RVPINLIVQHIQ\DI LNGGPS\NRQTNGLNGYTPSRKRQASESSSRPH
5412	3180	313	QGISNFFHKEANFWFVEVSGYLISPLRSPFVDPALEWSLMASPWN KMEGESSRFEIHTPVSDKKKKCSIKERPKHSHIEFRDSSLV NEQSQTTRRKKRKKDFQHLISSPLKKSRI CD ETANATSTLKKRK KRRYSALEVD EEA GVTVVLVDKENINNTPKHFRKD VDVVCVDM SIEQKILPRK\PKTDKFQVLA KSH\AHKSEALHSVREKKNKHQR KAASWESQRA\RDTPQSEFPTQEEBSWLSVGPGGEITELP\ASA HKNKSKKKKKSSNREBYET\LAMPEGSQAGREAGTDMQESQPTV GLDDETPQLLGPTHKKSKKKKKKSNSHQEFESLAMPEGSQVGS EVGADMQES\RPAVGLHGETAGI\PA P AYKNSKKKKKSNSHQEF EAVAMPESLESAYPEGSQVGSEVGTVEGSTALKGFKE NSNSTKK SKKRKLTSVKRARVSGDDFSVPSPKNSESTLFDSVEGD GAMMEEG VKSRRPRQKKTQACIASKHVQEAPRLEPANEHHNVETAEDSEI RY LSADSGDADDSADLGSAVKQLQEFIPNIKDRATSTIKRMYRDD LERFKEFKAQGVIAKFGKFSVKENKQLEKVNVEDFLALTGIESAD KLLYTDYRPEEKSVITNLKRRYFSRLHIG\RNIA RPWKLIIYRA KKMFDVNNYKGRYSEGT EKLMKHSLLGNDWTIGEMVAR RSL SVALKFSQISSQRNRGAWSKSETRKLKIAVEEVILKKMSPQELK EVDSKLQENPESCLSI VREKLYKGISWVEVA KVQTRNWMCQKS KWTEILT KRM TN GRRI YYGMNALR A KVSLIERLYEINVEDTNEI DWEDLASAIGDVPSYVOTKFSRLKAVYVPFWQKTFPEIIDYL YETTLPLLKEKLMMEKKGT\QTPAAPKQVFPFRDIFYYEDD SEGGGRKRKRRP RRRHAWFTP VPV I PVLWEAKAGWII
5413	3753	1304	RFPAGVAPRRAMANVSKVWSGRDRDDEEAAPLLRRTARP GGG TPILLNGAGPGGAQRSQPSRSALFRVGHMSSVKL DDELLEP\DM DPP HPFPKEI PHNEKLLSLKYESLDYDNSENOLFLEEERRINHTA FR TVEIKRWICALIGILTGLVACFIDIVVENLAGLK YRVIKGNID KFTEKGGLSFSLLWATLNAAFV LVGSVIVAFTEPVAAGSGIPO IKCFLNGVKIPH VVR LKTLVIVKSGVILS VVGGLAVGKEPMIH SG SVIAAG\ISQGRSLK RDKF KI FEYL RRDTEK RD FVSAGAAG VSAAFGAPVGGVLF SLEEGASFWNOFLTWRIFFAS MISTFTLNF VLSIYHG NMWDLSSPGLINFGFRFDSEK MAYTIHEIPVFI AMGVV GGVLGAVF NALNYWLT MFRIRYI HRP CLQVIEAVLVA AVTATVA FVLIYSSRDCQPLQGGSMSYPLQLFCADGEYNSMAAFFNTPEK

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			SVSLSFHDPGGSYNPPLTGLFLTVYFFLACWTYGLTVSAGVFIP SLLIGAAWGRLGFCISLSYLTAIIWADPGKYALMGAAAQLGGIV RMTLSLTIVMEATSNVTYGFIFMLVLVLMATAKIVGDVFIEGLYDM HIQLQSVFPLHWEAPVTSHSLTAREVMSTPVTCRLRRREKVGVIV DVLSLSDTASNHNGFPVVEHADDTQPARIQGLLILRSQLIVLHKV FVERSNLGLVQRRLRLKDFRDAYPRFPPPIQS1HVSQDERECTMD LSEFMNPSPYTVPQEASLPRVFKLFRALGLRHLVVVDNRNQVVG LVTRKDLARYRLGKRGLEELSLAQ
5414	2130	390	GVASAWDRLFSPLLSPSTSRRVFTSPPRCVSTETGRRDRARVPS QCVSCLQGKLPVSGRTSLACVRSILLSPASSPRKVGIVGCTGAR AGAAPRDHGVRVRRHPRSSARRMTRTTGQCLAPRGCGQPRGRTRSP RSPRSRTRRGCSASPACLP/CRALIVAVLCYINLLNYMDRFTV AGVLPDIEQFFNIGDSSSGLIQTVFISSYMVLAPEFGYLGDYN RKYLMCGGIAFWSLVTLGSSFIPGEHFWLLLTRGLVGVGEASY STIAPTLIADLFVADQRSRMLSIFYFAIPVGSGLGYIAGSKVKD MAGDWHWALRVTPGLGVAVVLLFLVVRPFRAVERHSIDLPLPPL NPTSWWADLRALARNPFSVLSLSSGFTAVAFVTGSLALWAPAFLL RSRVVLGETPPCLPGDSCSSSDSLIFGLITCLTGVLGVGLGVEI SRRRLHSNPRADPLVCATGLGSAFPLFLSLACARGSVATYIF IFIGETLLSMNWAIVADILLYVVIPTRRSTAEEAQIVLSHLLGD AGSPYLIQLIISDRLRRRNWPPSFLSEFRALQFSLMLCAFVGALGG AAFLGTAHLH
5415	693	2986	I PPPKTKLELQKH\LTILT\NQEQTATFEEVQKLRPRNEQRENEL IISFLRCLFEEKQKEHIHIGEMKQTSQMAAENIGSELPPSATRF RLDMLNKAKRSLTESLESILSRGNKARGLQEHSLISVLDLSSLS STLSNTSKEPSVCEKEALPISESSFKLLCSSEDLSSDSESHLPE EPAPLSPQOAFRRRANTLSHFPIECQEPPQPARGSPGVSQRKLM RYHSVSTETPHERKDFESKANHLGDSGGTPVKTRRHWSWRQQIFL RVATPKACDSSSSRYEDYSELGEELPPRSPLEPVCEDGPFGPPPE EKKRTSRELRELWQKAIQQLQIILRMEKENQKLQASENDLLNKRL LKLDYEBITPCLKEVTTVWEKMLSTPGRSKIKFDMEKMHSAVGQ GVP\RHHRGEIWKFQFLAQFHLKHOFPSKQQPKDVPYKELLQQLT SQQHAILIDLGRTPHTPYFSAQLGAGQLSLYNILKAYSLLDQE VGYCGQLSFVAGIILLLHMSEEEAKMLKFLMFDMGLRKQYRPDM IILQIOMYQLSRLLHDYHRDLYNHLBEEHEIGPSLYAAPWFELTMF ASQFPLGFVARVFDMFIFLQGTEVFKVALSLLGSHKPLILQHEN LETIVDFIKSTLPNLGLVQMEKTINQVPEMDIAKQLQAYEVEYH VLQEELIDSSPLSDNORMDKLEKTNSSLRKQNLDLLEQLQVANG RIQSLEATIEKLSSSESKLKQAMLTLELERSALLQTVEELRRS AKPSDRPECTQPEPTGD
5416	27	4074	KSQLCFWGKGKAGDILSGDQDKEQKDQPYFVETPYGYQLDDFLK YVDDIQKGNTIKRNLNQKRRKPSVPCPEPRTSGQOGIWTSTES LSSSNSDDNQCPNPLIARSQVTSTPISKPVPPLETSLPFLTIP ENRQPLPPSPQPLPKHNLHVTKTLMETRTRRLEQERATMQMTPGEF RRPRLASFGGMGTTSLLPSFVGSGNHNPQKHLQNGYQGNGDYG SYAPAAPTTSSMCSSIRHSPLSSGISTPVTNVSPMHLQHIREQM AIALKRLKELEEQVRTIPVLUQKVISVLQEEKRQLVSQLKNQRAA SQINVCGVRKRSYSAGNAQSLEQLSRARRSGGELYIDYEEEEME TVEQSTQRIKEFROL\TADMQALEQKIQDSSCRASSERLRENGEC RSVAVGAFENMNDIVVYHRSRSCKDAAVGTLVEMRNCGVSVTE AMLGVMTAEDKEIELQQQTIESLKEK1YRLEVQLRETTTHDREM KLKQELQAAGSRKKVDKATMAQPLVFSKVVEAVVQTRDQMVGSH MDLVDTCVGTSVETNSVGJSCQPECKNKVVGPELPMNWIVKER VEMHDRCAGRSVECDKSVSVEVSVCETGSNTESVNDLTLKLT NLNLKEVRSIGCGDCSVDVTVCSPKECASRGVNTAEVSQVEAV MAVPRTADQDTSTDLEQVHQFTNTETATLIESCINTCLSTLDKQ TSTOTVETRTVAVGEGRVKDISSSTKTRSIGVGTLLSGHSGFDR PSAVKTKESGVGQININDNYLVGLKMRITIACGPPQLTVGLTASR RSVVGDDPVGESLENPQPQAPLGMGTMGLDHYIERIQLLAEQQ TLLAENYSELAEFAGEPHEPSQMGSLNSQLISTLSSINSVMKSAST EELRNPDPFQKTSLSGITGSYLGTYCKCGLQSGSPLSQTSQPE

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			QEVTSEGKPISSLDASFPTQEGTLSPVNLTDDQIAAGLYACTNN ESTLKSIMKKDGKDSNGAKNLQFVGINGGYETTSSDDSSSD ESSSES3DDECVDIEYPLEEEEEEDEDTRGMAEGHHAVNIEGL KSARVEDEMVGQCEPEKVEIRERYELSEKMLSACNLLKNTIND PKALTSDKMRFCINTLQHEWFRSSQSAIPAMVGDYIAAFEAISPDVLRYVINLADGNGNNTALHYSHSNFEIVKLLLDADVCNVD HQNKAGYTPIMLAALAAVEAEKDMRIVEELFGCGDVNAKASQAG QTALMLAVSHGRIDMVKGLLACGADVNIQDDEGSTALMCASEHG HVEIVKLLLAQPGCNCNGLLEDNDGSTALSTALEAGHKDIAVLLYAHVNFAKAQSPGTPLGRKTSPGPTHRGSD
5417	27	4074	KSQLFCFWGGKAGDTLSDQDKDQKDPYFVFTPYGYQLDDFLKYVDDIQKGNTIKRLNIQKRRKPSVPCPEPRTSGQQGIWTSTESLSSNSDDNKQCPNFNLIARSQVTSTPISKPPPPLTSPLFLLTIPENRQLPPPSQPLPKHNLHVTKTLMETRRRLQERATMQMTPGEFFRPRLASFGGMGTSSLPSFVCSGNHNPAKHOLQNGYQGNGDYGSYAPAAPITSSMSSSIRHSPLSGISTPVTNVSPMHLQHIREQMAIALKRLKELEEQRVTIPVLQVKISVLQEEKRQLVSQLKNQRAASQINVCGVRKRYSAGNASQLELSRARRSGGELYIDYEEEEEETVEQSTQRIKEFROL\TADMQALEQKIQDSSCEASSELRENGECRSVAVGAEEENMNDIVVYHRGSRSCKDAAVGTLVEMRNCGVSATEAMLGVMTRADKEIELQQQTIESLKEKIYRLEVQLRETTHDREMTKLKQELQAGSRKVKDVKAATMAQPLVFSKVVAEVVQTRDQMVGSMDLVDTCVGTSVETNSVGJSCQPECKNKKVVGPELPQPMNWVJKVEREMHDRCAGRSVEMCDKSVSVEVSVCETGSNTEESVNDLTLKTNLNLKVERSIGCGDCSVDTVCSPKECASRGVNTAEAVSQV3AAVMAPRRTADQDTSTDLEQVHQFTNTETATLIESCTNTCLSLDKQTSTQTVETRTVAVGEGRVRKDINSSTKTRSICVGTLSSGHGFDRPSAVKTKESGVGOININDNYLVLGKMRITACGPPQLTVGLTASR RSVGVGDDPVGESLENPQPQAPLGMMTGLDHIERIQKLLAEQQTLLAENYSELAEAFGEPHSQMSGLNSQLISTLSSINSVMKSASTEELRNPDFQKTSIGLKITGSYLYGTCKCGGIQSGLSPLSQSTSQPEQBVGTSSEGKPISSLDASFPTQEGTLSPVNLTDDQIAAGLYACTNNESTLKSIMKKDGKDSNGAKNLQFVGINGGYETTSSDDSSD ESSSES3DDECVDIEYPLEEEEEEDEDTRGMAEGHHAVNIEGLKSARVEDEMVGQCEPEKVEIRERYELSEKMLSACNLLKNTINDPKALTSDKMRFCINTLQHEWFRSSQSAIPAMVGDYIAAFEAISPDVLRYVINLADGNGNNTALHYSHSNFEIVKLLLDADVCNVD HQNKAGYTPIMLAALAAVEAEKDMRIVEELFGCGDVNAKASQAG QTALMLAVSHGRIDMVKGLLACGADVNIQDDEGSTALMCASEHG HVEIVKLLLAQPGCNCNGLLEDNDGSTALSTALEAGHKDIAVLLYAHVNFAKAQSPGTPLGRKTSPGPTHRGSD
5418	24	1133	SVPRAGGDMETGAAELYDQALLGILQHVGNVQDFLRVLFGFLYRKTDFYLLRHPSDRMGFPQGAQALVLQVFKTFDHMARQDDEKRQELEEKIIRRKEEEEAKTVSAAAEEKEPVVPVVOEIEIDSTTEL DGHQEVEKVQPPGPVKEMAHGSQEAEAPGAVAGAAEVPR\EPPI LPRIQEQQFKNPDSYNGAVRENTWSQDYTELEVRVVPVKHVKGKQVSVALSSSSIRVANLEENGERVLMIEGKLTHKINTESSLWSLEPGKCVL VNLSKVGEYWWNAILEGEEPIDIDKINKERSMATVDEEEQAVLDRLTEDYHQKLQGKPOSHELKVHEMLKKGWDAEGSPFQRFDPMENISPAGAVQF
5419	1395	259	GTHPLDPDLVSRSTSVQGPLMTMACPGMSDTEESPFLGPRAAEGBSESEACEAFGRRKSEEGRRSRDTSGFGRSRKHKVWNWKPERADA KDPASLPQC/LGP/DCVRPAQPSKSYCSDDCGMKLAANRIYEIL PQRIQQWQQSPCIAEEHCKKLLERIRREOQSARTRLQEMERRFI ELEAIILRAKQQAVREDEESNEGDSDDTDLQIFCVSCGHPINPR VALRHMERCYAKYESQTSFGSMYPTRIEGATRLFCDVYNPQSKTYCKRLQLVLCPEHSRDPKVPDAEVCGCPLVRDVFEILTGDFCRLPKRQCNRHYCWEKLRRAEVDLERVRVWYKLDLFQERNVRTAMTRAGLALMLHQTIQHDPPLTDLRSSADR
5420	117	1733	NEAGGACPFKGGASGRILYLSPLRPRVSAGCEERPLGWVWLGGGGFLPARPPRAQRHLGFSHAEQSMEAPDYEVLSVREQLFHERR

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			ECIISTLLFATLYILCHIFLTFKKPAEFTT\GMMKMPSTR/\LLELCFTLIAIALGAVLLLPSIISNEVLLSLPRNYYIQWLNGS LIHGLWNLVPLFSNLSLIIFLMPFAYFFTESEGFGASRKGVGLGRV YETVVMLMLLVLGMVVVASAIVDKNKANRESLYDFWEYYLP YLYSCISFLGVLLLVLVCTPLGLARMFMSVTGKLLVKPRLLEDLEE QLYCSAFEEAALTRRICNPTSCWLPLDMELLHRQVLAQTORVL LEKRRKASAQRNLGYPLAMLCLLVLTLGLSVLIVAIHILLELLID EAAMPRGMQGTSLGQVSFSKLGSFGAVIQVVLIFYLMVSSVVG YSSPLFRSLRPRWHDTAMTOIIGNCVCLLVSSALPVFSRTLGL TRFDLLGDFGFRFNWLGNFYIVFLYNAAFAGLTTLCLVKTFTAAV RAELIRAFGERE
5421	117	1733	NEAGGACPFKGGASGRYLILSPRLPRVSVAGCEERPLGWWVLLGG GGFLPARPPRAQRHLGFSHAEQSMEAPDYEVLSVREQLFHERIR ECIISTLLFATLYILCHIFLTFKKPAEFTT\GMMKMPSTR/\LLELCFTLIAIALGAVLLLPSIISNEVLLSLPRNYYIQWLNGS LIHGLWNLVPLFSNLSLIIFLMPFAYFFTESEGFGASRKGVGLGRV YETVVMLMLLVLGMVVVASAIVDKNKANRESLYDFWEYYLP YLYSCISFLGVLLLVLVCTPLGLARMFMSVTGKLLVKPRLLEDLEE QLYCSAFEEAALTRRICNPTSCWLPLDMELLHRQVLAQTORVL LEKRRKASAQRNLGYPLAMLCLLVLTLGLSVLIVAIHILLELLID EAAMPRGMQGTSLGQVSFSKLGSFGAVIQVVLIFYLMVSSVVG YSSPLFRSLRPRWHDTAMTOIIGNCVCLLVSSALPVFSRTLGL TRFDLLGDFGFRFNWLGNFYIVFLYNAAFAGLTTLCLVKTFTAAV RAELIRAFGERE
5422	3	1263	SCGESLPTWLAGASRPGLGRKGGAWGGRGGSSPAQVLLSPGPVF KAGCNWWHLSRDQAGVQRCDLGSQQPPPLGFKRFSCLSLPSSWD YRSTVLCVSKMMEAIDLGSFNIDAPRWDORTFLGRVKHFLNITDPR TVFVSERELDWAKVMVEKSRSRMGVVPPGTQVEQLLYAKLYDSAF HPDTGEKMNVIIGRMSFQLPGGMIITGFMQLQFYRTMPAVIFWQWV NQSFNALVNNTNRNAASPTSVRQMAISYFTATTAVATAVGNMN LTKKAPPLVGRWVPFAAAVAAANCVNIPMMRQQEIKGICVKDRN ENEIGHSRRAAAIGITQVVISRITMSAPGMILLPVIMERLEKLH FMQKVVKL/SAPLQVMLSGCFLIFMVPVACGLFPQKCELPVSYL EPKLQDITKAKYGELEYPYVYFNKG
5423	3186	905	GVSMALGEEKAEAEASEDTKAQSYGRGSCREREELDIPGPMSGEQ PPRLEAEGLISPVWGAEGIPAPTCWIGTDPGGPsRAHQPQASD ANREPVAERSEPALSGLPPATMGSGDLLLSGESQVEKTKLSSSE EFPTQTLSPRTTICSGHDADTEDDPSSLADLPQALDLSQQPHSSG LSCLSQWKSVLSPGSAAPQSSCSISASSTGSSLQGHQERAEPRG GSLAKVSSSLEPVVPQEPSSVVGGLGPRPQWPQVFSGGDASGL GRRRLSFQAHEYWACVLPDSLPPSPDRHSPLWNPNKEYEDLLDYT YPLRPGPQLPKHLDLSRVPADPVLQDSGVVDLDSFSVSPASTLKSP TNVSPNCPPAEATALPFGSPREPSLKWPSRVPQKQGGMGLASW SOLASTPRAPGSRNDARWERREPALRAKDRLTIGKHLDMGSPQL RTRDRGWPSPRPEREKRTSQSARRPTCTESRWKSEEVESEDDEY LALPARLTQVSSLVSYLGSISTLVTLPQTGDIKGQSPLEVSDSDG PASFPSSSSQSLPPGAAALQGSGDPEQCNPCFLRSFVRAHDSAG EGSLGSSSQALGVSSGGLKTRPSLSPARLDRWPFSDPDVEGQLPRK GGEQGKESLVQC\VKTCP\COLEELICWLYNV\ADVTDHGTPAR SNLTSLK\SSLQLYRQFKKDIDRHQSILTFSVLQKGEILLQCLLE NTPVILEDVLGRIAKQSGELESHADRLYDSILASLDMLAGCTLIP DKKPMAAMEHPCEGV
5424	3186	905	GVSMALGEEKAEAEASEDTKAQSYGRGSCREREELDIPGPMSGEQ PPRLEAEGLISPVWGAEGIPAPTCWIGTDPGGPsRAHQPQASD ANREPVAERSEPALSGLPPATMGSGDLLLSGESQVEKTKLSSSE EFPTQTLSPRTTICSGHDADTEDDPSSLADLPQALDLSQQPHSSG LSCLSQWKSVLSPGSAAPQSSCSISASSTGSSLQGHQERAEPRG GSLAKVSSSLEPVVPQEPSSVVGGLGPRPQWPQVFSGGDASGL GRRRLSFQAHEYWACVLPDSLPPSPDRHSPLWNPNKEYEDLLDYT YPLRPGPQLPKHLDLSRVPADPVLQDSGVVDLDSFSVSPASTLKSP TNVSPNCPPAEATALPFGSPREPSLKWPSRVPQKQGGMGLASW

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			SQLASTPRAPGSRNDARWERREPALRGAKDRLTIGKHLDMGSPQLRTRDRGWPSPRPEREKRITSQSARRPTCTESRKSEEEVESDEYLALPARLTQVSSLVSYLGSISTVLTPGDKIKGQSPLEVSDDGPASPFPSSSSQSQSLPPGAALQGSGDPEGQNPFCFLRSFVRADHSAGEGSLGSSQALGVSSGLLKTRPSLPARLDRWPFSDPDVEGQLPRKGGEQGKESLVCQ\VKTF\COLEELICWLVNV\ADVTDHGTPARSNLTSLK\SSLQLYRQFKKDIDEHQSLTESVLQKGEILLOCLLENTPVLEDVLGRIAKQSGELESHADRLYDSILASLDMLAGCTLIPDKKPMAMAHEHPCGEV
5425	1086	115	GFCPSPSLGHQOPPRVLPHTMSMAVETFGFFMATVGLLMLGVTLPSNSYWRVSTVHGNVITNTNTIFENLWFSCATDSLGVYNCWEFPMLALSGYIQACRALMITAII LLGFLGLLLGIAGLRCCTNIGGLELSRKAKLAATAGAPH\ILPGICGMVAT\SWYAFNITR\DFSDPLYPGTKYEIGPA LYLGWSASLISI LGGLCLCSACCCGSDEDPAASARP YOAPVSVMPVATSDQEGDSSPFKYGRNALRAVALCRGPRCLPTAPKKRGPGRGPFPYNSLRGRPRPVPVAPPRPRVPLHSHGPSQAKNCSWEVAYLPSEAGSLIF
5426	42	3435	ATSSQSLGRADP PRGGTMERSPGEGPSPSMDQPSAPS DPTDQPAAHAKPDPGSGGGPAGPGAAAGEALAVLTSFGRRLLVLI PVYLA GAVGLS VGFVLFGLALYL GWRRVRDEKERSLRAARQLL DDEEQLTAKTLYM SHRELPAWVS FPDVEKA EWL NKIVA QVW PFLGQYMEKLLAETV A PA VRGSNPHL QTFTFTRV E LGEKPLRIIGV KVHPGQRKEQ ILLDLN ISYVG DVQID VE VKV KYFCKAGV KGQML HGVL R VILEPLIGDLPFVGAVSMFFIRRPTLDINWTGTMNLLDIPGLSSLSDTMIMDSIAAFLVLPNRLLVLPV PDLQDV A QLRSPL P RGI IRIHL LAARGLSSKD KYV KGLIEGKSDPYA V RL GTQTFC SRV IDEELNPOWGETYEV MVH E VP GQ EIEVEV FVD KDP DKD F LGR MKL DV GK VQK DSDW FPLQGGG QVHL R LEW LSLLS DAEK L E QV L QWNWG VSSRPDPPSAAI LVVYLDRAQDLPMV TS ELYPPQ LKKG NKEPNP MVQLSIQDV T QESK AVY STNC P VWE E AFR FFLQDPQ S QELD VQVKDDSR AL TLG AL TL TA PEL I LDQW FQ L SSGP NSR LYMKLVMR ILYL DS SE ICF PT VP GCP GA WD VD S ENP QR GSS VD APPR PCHTTPD SQFGT EH V L R I H V L E A Q D L I A K D R F L G G L V K G K SD PYVKLKL AGRSFRS HVV R EDLN P R N V E N V F E V I V T S V P G Q E L E V E F VDKDLKDDFLGRCKVRLTTV LNSGFLDEWL TLEDVPSGRHLRLERLTPRPTAAELE E V L QV NSL I Q T Q K S A E L A A L L S I Y MERAEDLPLRKGT KHLSPYATLTVGDSSHKT K T I S Q T S A P V W D E S A F L I RKPHTESLELOV R G E CTGV L G S L S P L S B L L V A D Q L C L D R W F T LSSGQQVLLRAQLGILVLSQHSGVEAHSHSYSHSSSLSEEPELS GGPPHITSSA P E V \R QRLTHV D S P L E A P A G P L G Q V K L T L W Y S EERK L V SIVH G C R S L R Q N C R D P P D Y V S L L L P D K N R G T K R R T S O KKRTLSPEFNERWEELPLDEAQRRKLDVSVKSNSSFMSRERELLGKVQLD LAETDLSQGVARWYDLMNDNKDGSS
5427	42	3435	ATSSQSLGRADP PRGGTMERSPGEGPSPSMDQPSAPS DPTDQPAAHAKPDPGSGGGPAGPGAAAGEALAVLTSFGRRLLVLI PVYLA GAVGLS VGFVLFGLALYL GWRRVRDEKERSLRAARQLL DDEEQLTAKTLYM SHRELPAWVS FPDVEKA EWL NKIVA QVW PFLGQYMEKLLAETV A PA VRGSNPHL QTFTFTRV E LGEKPLRIIGV KVHPGQRKEQ ILLDLN ISYVG DVQID VE VKV KYFCKAGV KGQML HGVL R VILEPLIGDLPFVGAVSMFFIRRPTLDINWTGTMNLLDIPGLSSLSDTMIMDSIAAFLVLPNRLLVLPV PDLQDV A QLRSPL P RGI IRIHL LAARGLSSKD KYV KGLIEGKSDPYA V RL GTQTFC SRV IDEELNPOWGETYEV MVH E VP GQ EIEVEV FVD KDP DKD F LGR MKL DV GK VQK DSDW FPLQGGG QVHL R LEW LSLLS DAEK L E QV L QWNWG VSSRPDPPSAAI LVVYLDRAQDLPMV TS ELYPPQ LKKG NKEPNP MVQLSIQDV T QESK AVY STNC P VWE E AFR FFLQDPQ S QELD VQVKDDSR AL TLG AL TL TA PEL I LDQW FQ L SSGP NSR LYMKLVMR ILYL DS SE ICF PT VP GCP GA WD VD S ENP QR GSS VD APPR PCHTTPD SQFGT EH V L R I H V L E A Q D L I A K D R F L G G L V K G K SD PYVKLKL AGRSFRS HVV R EDLN P R N V E N V F E V I V T S V P G Q E L E V E F VDKDLKDDFLGRCKVRLTTV LNSGFLDEWL TLEDVPSGRHLRL

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			ERLTPRPTAAELEEVLVQVNLSIQTQKSAELAALLSIYMERaed LPLRKGTKHLSPTYATLTVDGSSHKTKTISQTGAPVWDEASFLLI RKPHTESLEQVRGEVTGVLGSLSLPLSELIVADQLCLDRNFTL SSGQGVLLRAQLGILVLSQHSGVEAHSHSYHSSSSLSEEPELS GGPPHITSSAPEV\QRQLTHVDSPLEAFAGPLGVQL-TLWYSE ERKLVSIVHGCRSLRQNGRDPDPPYVSLLLLPPDKNRGTKRRTSQ KKRTLSPEFNERFEWELPLDEAQRRKLDVSVKSNSFMSR3REL LGKVQOLDLAETDLSQGVARWYDLMNDNKDKGSS
5428	3	1839	SSRSERLSACAIAPPWLVSRRPARPAQLQRPCKMVEDGABELED LVHFSVSELPSPRGYGVMEIRRGKLCVDVTKIGDHKFAHRIV LAASIPYFHAMTNDMMECQDIEVMQGMDPSALEALINFAYNG NLAIDQ2NVQSLLMGASFLQLQS1KDACCFLRERLHPKNCLGV RQFAETMMCACVLYDAANSFIHQHFVEVSMSEEFIALPLEDVL VSRDELNVKSEEQVFEEAALAWVRYDREQRGTF\RNLIQSNIRLL FCRPQFLSDRVQODDLVRCCHKCRDLVDEAKDVLLMPERRPHLP AFTRPRCCTSIAGLIYAVGGLNSAGDSLNVNEVFDPIANCWER CRPMTTARSRVGVAVVNGLLYAIGGYDGQLRLSTVQAYNTEDT WTRVGSMSNKSRSAMGTVVLDGQIYVCGGYDGNSLSSVETYSPE TDKWTVVTSMSNSRCAA\GVIVFEGRIYVSGHDLQIFSSVEH YNHHTATWHPAAGMLNKRCRGAASLGSKMFVCGGYDGSGFLSI AEMYSSV\ADQWC1IVPM\HTRR\SRVSLGGPAVGRLYAWGVT TGQSNL\SSVGDVLTPTDCWTFM\APMACHEGGVGVGCIPLLT I
5429	828	202	RREDALSSEGCLWPSESTVSGNGT\PEPQVYAPPRPTDRLAVPPF AQRERFHREQPTYPYLQHEIDLPPTISLSDGEPPPPYQGPCTLQ LRDPEQQLELNRESVRAPPNRTIFDSDLMDSARLGGCPSSNS GISATCYGSGGRMEGPPP\TYSEVIGHPGSSFQHQSSGPPSL LEGTRLHHTHIAPLESAAWSKEKDQKGHPL
5430	441	1507	QKRRKRRRKKIMKTIQPKMHNSTISWAIFTGLAALCLFQGVPVRS GDATFPKAMDNTVRQGESATLRCITIDNRVTRVANLNRTSILYA GNDKWKLDPRVVLLSNTQTQYSIEIQNVDVYDEGPYTCVQTDN HPKTSRVHLIVQVSPK1VBEISSDISINEGNNISLTCIATGRPEP TVTWRHISPKAVGFVSEDEYLEI1QGITREQSGDYECASNDV\A APV\VRVKVTVNYPPI1SEAKGTGVPVGQKGLQCEASAVPSA EFQWYKDDKRLI\EGKKGVKVENRPFLSKLIFFNVSEHDYGNYT CVASNKLGHNTAS1MLFGPGAVSEVNSGTSRAGCVWLLPLLV HLLLKF
5431	2	1312	AAAAPGSRRRRPLPDRPHMAHGYEAAPPAPRSPAWRARSKPV\ LPGITINP\TIAEGPSP\TSEGASEANLVDLQKLEELELDEOO KKRLEAFLTQKAKVGEALKDDDFERISELGAGNGGVTKVQHRPS GLIMARKLIHLIEIKPAIRNQIIRELQVLHECNSPYIVGFYGAFY SDGEISICMHEMDGGSLLDQVLKEAKRIPEEILGKVSIAVRLGLA YLREKHQIMHRDVKPSN1LVNSRGEIKLCDFGVSGQLIDSMANS FVGTRSYMAPERLQGTHYSVQSD1WSMGLSLVELAVGRYPIP DAKELEAIFGRPVVWDGEEGEPHSISPRPRPPGRPVSGHGMDSRP AMAIFELLDYIVNEPPPPLPNVFTPDFQEFVNKCLIKNPAAERA DLKMLTNHTFIKRSEVEEVDFAGWLCKTLRLNQPGTPTRTAV
5432	2	1312	AAAAPGSRRRRPLPDRPHMAHGYEAAPPAPRSPAWRARSKPV\ LPGITINP\TIAEGPSP\TSEGASEANLVDLQKLEELELDEQQ KKRLEAFLTQKAKVGEALKDDDFERISELGAGNGGVTKVQHRPS GLIMARKLIHLIEIKPAIRNQIIRELQVLHECNSPYIVGFYGAFY SDGEISICMHEMDGGSLLDQVLKEAKRIPEEILGKVSIAVRLGLA YLREKHQIMHRDVKPSN1LVNSRGEIKLCDFGVSGQLIDSMANS FVGTRSYMAPERLQGTHYSVQSD1WSMGLSLVELAVGRYPIP DAKELEAIFGRPVVWDGEEGEPHSISPRPRPPGRPVSGHGMDSRP AMAIFELLDYIVNEPPPPLPNVFTPDFQEFVNKCLIKNPAAERA DLKMLTNHTFIKRSEVEEVDFAGWLCKTLRLNQPGTPTRTAV
5433	360	1885	SVOEDKVGfedPLHILCSWRARACPCWTPHC/CTGLLECLGFAGV LFGWPSL VFVFKNEDYFKDLCGPDAGPIGNATGQADCKAODERF SLIFTLGSFMMNFMTFPTGY1FDRFKTTVARLIAIFFYTATLI

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			IAFTSAGSAVLLFLAMPMLTIGGILFLITNLQIGNLFGQHRSTI ITLYNGAFDSSAVFLIIKLLYEKGISLR/VLLHLHLCIQLYAC STHFFPDAPGAHPPIPTAPQOLQWLPVPWPWEWHHGREG/QQLSMKT GSYSQRSSFQRQRKPQGGQRSRNSAPSAGATL/CSRRFAWHLVWL SVIQLWHYLFIGTLNSLLTNMAGGDMARVSTYTNAFAFTQFGVL CAPWNGLLMDRLKOKYQEAKRTGSSTLAVALCSTVPSLALTSL LCLGFALCASVPLPLQYLTFILQVISRSFLYGSNAAFLTLAFTP SEHF GKLFGLVMALSAVSVSLLQFPIFTLIKGSQNDPFYVNVMF MLAILLTFFFHPFLVYRCRTWKEPSAIA
5434	66	652	RYAAIIISLIQHKLLWRNQHCSCRVIMSPAQSAQGLNWLF/GSGK HGPFGLCSQYPACDYVRPLKSSADGHIVKVEGQVCPACGANLV LRQGRFGMFFIGCINYPECEHTELIDKPDETAITCPQCRTGHLVQ RRSRYGKTFHSCDRYPECQFAINFKPIAGECPECHYPLLIEKKT AQGVKHFCASKQCGKPVSAE
5435	4704	1597	PGDSQRQLAEMNSNAKERKHAKKMRNQPTNVTLSSGFVADRGVKH HSGGEKPKFAQKQEPHPGTSRQROTRVNPHSLPDPEVNEQSSSK GMFRKKGGWKAGPEGTSQEI PKYI TASTFAQARAEEISAMLKAV TQKSNSLVLVQFTLPRHMRRRAMSHNVKRLPRLQEI AQKEAEKA VHOKKEHSKNKCKARRCHMNRTLEFNRRQKNNIWLETHIWHAK RFHVKKGWGYCLGERPTVKSHRACYRAMTNRCLLQDLSYCCLE LKGKEEEILKALSGMCNIDTGLTFAAVHCLSGKRQGSVLVYRVN KYPREMLGPVTFIWKQSQRTGPDPSESRSQWIWLHPTLKDILEE IKAACQCVEPIKSAVCIAADPLPTPSQEKSCQTELPEKIGKKRKR KDDGENAKPIKKIIGDGTRDPCLPYSWISPTTGIIISDLTMEMN RFRLIGPLSHSILTEAIKAASVHTVGEDTETPHRWNIETCKKP DSVSLHCRQEAI FELLGGITSPAEI PAGTILGLTVGDPRINTLPQ KKS KALPNPEKQCDNEKVQLLLEGVPVECTSFIWNQDICKSV TENKISDQDLNMRMSELLVPGSQLGPHESKIPILLIQQPQKV TGEDRLLGWSGWVDVLLPKGWMGMAFWIPIFYRGVRVGGLKESAVH SQYKRSPNVPQDFPDCPAGMLFEEQAKNILEKYKRRPPAKRN YVKLGTIAPFCCPWEQLTQDWESRVQAYEPPSVASSPNGKESDL RRSEVPCAPMPKKTHQPSDEVGTSIEHPREAAEVMDAGCQESAG PERITDQEASENHVAATGSHLCVLSRKLLKQLSAWCGPSSEDS RGGRGRAPGRGQQGLTREACLSILGHFPRALVWVSLSSLKGSPPE PHTMICVPAKEDFLQLKEDHWYHCGPQESKHSDPFRSKILKQKEK KKREKRQKP\GRASSDGPAGEEPVAGQEAULTGLWSPGPLRVTL HCSR TLLGFVTOQGDFMSAVGCGEALGFVSLTGLLDMLSSQAAQ RGLVLLRPPASLQYRFARIAIEV
5436	1781	635	ASDSTPWSEARTTRKLAQRCQWSLPERMPLVVFCGLPYSGKSR RAEELRVALAAEGRAVYVDDA VLA VLA GAEDPAVYGDSAREKALRG ALRASVERRLSRHDVVILDSLNYIKGFRYELY\CLARAARTPLC LVYCVRPGGPIAGPQVAGANENPGRNVSVSWRPRAEEDGRAQAA GSSVLRLEHTADSVVNGSAQADVPKELEREESGAAESPALVTPD SEKSXAHGSGAFYSPILLEALTLRFEAPDSRNWRDRPLFTLVGL EEPPLPLAGIRSALEFNRAPPHQSTQSQPLASGSFLHQLDQVTS QVLAGLMEAQKSAVPGDLLTLPGTTTEHLRFTRPLTMAELSRLLR OFISYTKMHPPNNENLPQLANMFLOQLSQSLH
5437	739	1672	CQEAASEFGGPLHTPAMFLRRLGCCWLPRPWGRRKPMRDPDPYPE PRRVDSSENSGSDWDASAPTEMVGHPKTKDSGALRVSAASE PSKEPQVEQLGSKRMDSLKWDQPISTQESGRLEAGGASPPLR WDHVDSSGGT RRPVGSPPEGGL\GPVPGPAGPLEKPGRREKLLGWLR GEPGAPSRYLGGPEECIQLISTNLTLHLELLASALLALCSRPLR AALDTLGLRGPLGLWLHGLLSFLAALHGLHAVLSSLTAHPLHFA CLFGILLQALVLAVSIREPNGDEAATDWESEGLEREGEEQRGDPG KGL
5438	2443	1152	TKPRKRRHQ PASQRQRPWSSDSTGDL LARGKGRKEENKGSDRVS LAPP SLLRPPMMCQSEARQGP E LRAAKWLHFPQQLALRRRLGQ LSC MSRPALKLRSWPLTVLYYLLPFGALRPLS RVGWRPVSRVALYKS VPTRLLSRAWGRINQVELPHWLRP VYSLYIWTFGVNMKAAVE DLHHYRNLS E FFRKLKPQARPVCGLHSVISPSDGRILNFGQVK NCEVEQVKGVTVSLESFLGPRMCTEDLPFP PAAASCDSFKNQLV

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			REGNELYHCVIYLAPGDYHCFHSPTDWTSHRRHFPGSLMSVNP GMARWIKEFLCHNERVVLTDWKHGFFSLTAVGAT\NWGSIRIY FDRDLHTNSPRHSGSYNDFSVTHTNREGVPMA LRGEHLG/QS FN LGSTIVLIFEAPAKDFNQLKTGKIRFGEALGSL
5439	2443	1152	TKPRKRRHQFASQRQPWSSDGTGDLLARGKGRKEENGSDRVS LAPPSSLRRPMCMQSEARQGPFLRAAKWLHFPQLALRRRLQQLSC MSRPALKLRSWPLTVLYYLLPFAGLRLPSRVGWRPVSRVALYKS VPTRLLSRAWGLRNQVELPHWLRRPVYSLYIWTFGVN MKEAAVE DLHYRNLSEFFRKRLKPQARPVCGLHSVISP SDGRILNFGQVK NCEVEQVKGVYTSLESFLGPRMCTEDLPFPPAASCDSFKNQLVT REGNELYHCVIYLAPGDYHCFHSPTDWTSHRRHFPGSLMSVNP GMARWIKEFLCHNERVVLTDWKHGFFSLTAVGAT\NWGSIRIY FDRDLHTNSPRHSGSYNDFSVTHTNREGVPMA LRGEHLG/QS FN LGSTIVLIFEAPAKDFNQLKTGKIRFGEALGSL
5440	693	253	EPIPVTPDHRLVTMTHIV\QTFSPVNS\GQPPNYEMLK EEEQEV AMLGAPHNPAPPMSVTIHTSETSVDPHVWSLFNTLFBMNTCCLG FIAFAYSVKSRDRKRMVGDVTGAQAYASTAKCLNIWALILGIFMT ILLIIIPVLUVQAQR
5441	2	2054	CRDGKGNGPMVSPMKPLEIKTQCSGPRMDPKICPADPAFFSFIN NSDLWVANIE TGEERRLTFCHQGLSNVLDDPKSAGVATFVIQEE FDRFTGYWWCPTASWEGSEGLKTLRILYEEVDESEVEVIHVPSP ALERKTD SYRYPRTGSKNP KIALKLAEFQTD SQQCKIVSTQEKE LVQFSSLFLPKVEYIARAGWTRDGKYAWAMFLDRPQOWLQLVLL PPALFIPSTENEQQ\RLASARAVPRNVQPYVVYEEVTNVWINVH DIFYFPFPQSEG EDELCFLFRANECKTGCHLYKVTAVLKSQGYDW SEPFS PGEQE QSLTNAIWVNEETKLVYFQGKTD TPLEHHLYVVS YEAA GEIVRLTTPGF SHCSMSQN FDMFVSHYSSVSTPPCVH VY KLSGPDDDP LHKP RFWASMMEEAAKTFHFHTRS DVRLYGMIIYKP HALQPQK KHPTVLFVYGGPQVQLVNNSFKGIKYLRNLNTLASLG AVVVIDGRGSCQRGLRPEGALKNQMGQVEIEDQV EGLOQFVAE KY GFIDLSRVAI HGWSYGGFLS LMG LTHKPQVFKAIA GAPVTVWM AYDTGTYTERYMDV PENNQHGYEAGSVALHVEKLPN EPN RL LILH GFIDENVHFFHTNFLVSQLIRAGKPYQLQVALPPVSPQIYPNER HSIRCPESGEHEYEVTLHHFLQEYL
5442	1	3474	CGQRSSRRSPDMPEAKPAAKKAPKGKDAPKGAPK EAPPKEAPAE APKEAPPEDQSPTAEEPTGVFLKKPD SVS VETGKD AVVVA KVNG KELPDKPTI KWFKGKWL ELGSKSGARFSF KESHNS ASNVY TVEL HIGKVVLGD RGYYRLEVKA KADTCDS CGFNID VEA PRQDAS GQSL ESFKRTSEKKS D TAGELDFSG LKKREV VEEF KKKKK DDDDLG IPPEIWELLKGAKKSEYE KIAF QVG ITDLRGMLKRLKKAKV EVK KSAAF TKKL DPAYQV DRGN KIKL MVEIS DPD LTLKWF KNGQ EIK PSSK YV FEN V GK RIL TINK CT LADDA AYEV AVK DEK CFTE LFV KEPPV LIV TPLED Q QV FV GDR V EMAVE V SEE GAQ VMW MKD G VEL TREDSF KARYRFK KDGKR HILIF S D VV QED RGRY O VIT NG COCE AELIVEEKQ LEV LQDI ADL TVKASE QAV FKCE VS D EKV TGK WYK NGVEVRPSKRITISHVGRFHKL VID D VRP EDE GDY TFV PDG YAL GSLSAKL NLNFLEK V EYV PKQ\BPKP I PLGFAS GGKT SENAD\IV VVAGNKLRLDV\ SITGEAPS P FAT\WLKG\DEVFTTTEGRTRIE KRVDCCSFVIESAQ REDE GRYT KVTNP IGE DVAS IF LQV DVP DPPEA VRITSV GE D WAI L VWE PPMYDGGK PV TGYLVERKKKG SQ RWMKL NFEVFTETTYESTKMIEG ILYEM RVFAVNAIGV S QPS MN TKP FMPI APTSEPLH LIVED VT DTT TLKWRP PN RIGAGG IDGY LVEY CLEG SEEV WP ANTEP VER CGFTV KNL PIGAR IL F R VVG VN IAGRSEPA TLAQPV TIREIAEPPKIRL P RHLR QTYIRK VGE QLN LVV P FQGK P R P QV W TKG G APLD TS R V H V R T S D F D T V F F V R Q A A RSDSGEYEL SVQI ENM KDTA TIR VV EKA G P I NV M VKE W GT NAL VEW QAPK D D G N S E IM GYF VQ KAD KKT MEW FN VY E R N R H T C TV S D L I V G N B Y Y F R V Y T E N I C G L S D P G V S K N T A R I L K T G I T F K PFEYKEHD F RMAPKFLTPLIDRV VVAGYSAALNC A V R G H P K P K V VWMKNKMEIREDPKFLITNYQGVLTNIRRSPFDAGTYTCRAV NELGEALAECKLEVRVPQ

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5443	66	1003	SRGQLDAGQSSEHQGGNRQPEQSRSRSSSSSPRRSRSAAEPA MALSMPLNGLKBEDKEPLIELFVKAGSDGESIGNCPFSQRLFMI LWLKGVVFSVTVDLKRKPADLQNLAGPTHPPFITFNSEVKTDV NKIEFLEEVLCPPKYLKLSPKHPSNTAGMDIFAKFSAYIKNS RPEANEALERGLLKTQLKLDYLNNSPLPDEIDENSMEDIKFSTR KFLDGNEMTIACDNLLPKLHIVKVVAKKYRNFDIPKEMTGWIWY LTNAYRDEFTNTCPSDKEVEI\AYSDVAKRLHQVKSRLLKEVS FMSSP
5444	2	344	SGPIGVTGAQMAKWLRLDYLSEFGGRRPPPQPTPDYTESDILRAY RAQKNLDFEDPY*DSESRLEPDAGPGDSKNGDAKYGSPKHRL IKVEAADMARAKALLGGPGEELEADTEYLDPFDAQPHPAPPDG YMPEPYDAQWVMSLPGGRGVQLYDTPYEEQDDETADGPPSGOKPR QSRMPQEDERPADEYDQPWEWKDHISRAFAVQFDSPREWERTPG SAKELRRRPPRSPQPAERVDPALPLEKQPWFHGPLNRADAESLL SLCKEGSYLVRLSETNPQDCSLSLRSSSQGFLHLKFARTRENCVV LGQHSGPPSVPELVLYSSRPLPVQGAELHLALLYFVVTQTP*Q *PDWGDRRRPQNGVATGLPELGWAEAPSAAAHPGLHRERHPEGLP RAEKPGLRGPLLGLREPLGACPRGPWGLQEPRRCQVWFQSAPAH QGGCCGYCQSQGSPGRPRGGAGSRH
5445	2364	486	IILSRGFLGSVEICIQPLPASEPVLLLTIWARRRWRETRSRREPT TLRAQSVCWPWI*ETRMNRSIPEVVEDESEPYPSQLLKPIPEYSP EEESEPPAPNIRNMAPNNSI.SAPTMHNSSGDFSQAHSTLKLANH QRPVSRQVTCLRQVLEDSESFCRRHGPGLKAFPSGCSAVSEP ASESVVGALPAEHQFSFMEKRNQWLVSQLSAASPDTHDSDKSD QSLPNASADS LGGSQEMVQRQPQHNRNRAGLDLPТИDTGVDSDQPO DVLGIRQLERPLPLTSVCPQDLPRLRSREFPQFEPQRYPACA QMLPPNLSPHAPWNHYHCPGSPDHQPVYCHDYPRAAYQQVIQP ALPGQPLPGASVRGLHPVQVKILNYPSPWDQEERPAQRDCSFPG LPRHQDQPHHQPPNRAGAPGESLECPAELRPQVPQPPSPAAVPR FFSNPPARGTLKTSNLPEELRKVITYSMDTAMEVVKFVNFLLV NGFQTAIDI FEDRIRGIDIIKWMERYLRDKTVMIIVAISSPKYKQ DVEGAESQLDEDEHGLHTKYIHMRRMQIEFIKQGSMNFRFIPVLF PNAKEHVPTWLQNTHVYWSWPKNKKNILLRLLREEEYVAPPGP LPTLQVVP
5446	972	161	SSWSWCCTGRMRKTRLWGLNWMLFVSELRAATKLTEEKYELKEQQTLDVKCDYTLFKASSQKAQWIIRDGEEMPKTLACTERPSKNSHPVQVGRILILEDYHDHGLLRVRMVNLQVEDSGLYQCVIYQPKPEPHMLFDRIRLUVTKGFGSGTPGSNENSTQNVTQVYKIPPTTTKALCPLYTTPTRTVTQAPPKSTADVSTPDSEINLTNVTDIIRVPVFNIILLA GGFLSKSLVFSVLFAVTLRSFVP*AHEPTRMSSDFQPHPSGSCAKGGGR
5447	207	617	MTARTLSLMASLVAAYDDSDSEAETEHAGSFNATGOOKDTSGVAR PPGQDFASGTLDVPKAGAQPTKHGSCEDPGGYRLPLAQLGRSDRGSCPSQRQLQWPQKEPQVTFPIKEFSCSSLWTSHVPASHMPLAAA RFKQVKLSRNFPKSSFHQAQSESETVGKNGSSFQKKKCEDCVVPY TPRRLRQRQALSTETGKGDVEPQGPPAGRAPAPLYVGPGVSEFIQPYLNSHYKETTVPRKVLFLHRLGHRGPVNTIQWCPVLSKSHML LSTSMDKTFKVWNAVDGHCLQTYSLHTEAVRAARWAPCRRRIL SGGFDFALHLTDLETGTQFLSGRSDFRITLKFHPKDHNFLLCGGFSSEMKAIDI TGKVMRSYKATIQQTLIDILFLREGSEFLSTDASTRDASRTIIIAWDFRTSAKISNQIFHERFTCPSSLALHPREPVFLAQTNGNYLALFSTVWVPRYMSRRRRYEGHKVEGYSVGCECPG GDLLVTGSADGRVLMYSPTTASRACTLQGHTQACVGTTYHPVLP SVLATCSWGGDMKIWH*AFHWLSSLGEAIGDLAPARYSGPGRSLKSPSPSKSLVLLCGRAMFQPATCPWQLPALS
5448	194	1833	MASKVTDAIWVYQKKIGAYDQQIWEKSVEQREIKGLRNPKKKTA HVKPDLLIDVDLVRGSFAKAKPESPWTSLTTKGIVRVVFFF RWWLQVTSKVIFFWLLVLYLLQVAAIVLFCSTSSPHSIPLTEVI GPIIWLMLLGTVHCQIVSTRTPKPPPLSTGGKRRRKLRAAHLEV HREGDGSSTTDNTQEGAVQNHGTSTSHSVGIVFRDLWHAFFLS GSKKAKNSIDKSTETDNGYVSLDGKKTVKSGEDGIQNHPEQ CET

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			IRPEETAINTGTLRNGPSKDTQRTITNVSDVSSEEGPETGYSL RRHVDRTSEGVLNRNRKSHHYKKHYPNEDAPKSGTSCSSRCSSSR QDSESARPESETEDVLWEDLLHCAECHSSCTSETDVENHQINPC VKKEYRDDPFHQSHLPWLHSSHPGLEKISAIWEGNDCKKADMS VLEISGMIMRNVRNSHIPQIGYQIFGNAVSLILGLTPFVFRLSQA TDLEQLTAAHSASELYVIAFGSNEDIVIILSMVIISFVVRSVLWI FFFLLCVAERTYKQVGIM*TSEGVLNRNRKSHHYKKHYPNEDAPK SGTSCSSRCSSSRQDSESARPESETEDVLWEDLLHCAECHSSCT SETDVENHQINPCVKKEYRDDPFHQSHLPWLHSSHPGLEKISAI WEGNDCKKADMSVLEISGMIMRNVRNSHIPQIGYQIFGNAVSLI LGLTPFVFRLSQATDLEQLTAHSASELYVIAFGSNEDIVIILSMV IISFVVRSVLWIFFFLCVAERTYKQVGIM
5449	194	1833	MASKVTDAIWVYQKKIGAYDQQIWEKSVEQREIKGLRNKPCKTA HVKPDLIDVLDLVRGSFAKAKPESPWTSLTTKGIVRVVFFPFFF RWLQLQVTSKVIFFWLLVLVLYLLQVAAIVLFCSTSSPHSIPLTEVI GPIWLMLLGTVCQIVSTRTPKPLSTCGKRRRKLRKAALHEV IREGDGSSTDNTQEGAVQNHTGSTSHSVGTVFRDLWHAAFFLS GSKKAKNSIDKSTETDNGYVSLDGKKTVKSGEDGIQNHEPQCET IRPEETAINTGTLRNGPSKDTQRTITNVSDVSSEEGPETGYSL RRHVDRTSEGVLNRNRKSHHYKKHYPNEDAPKSGTSCSSRCSSSR QDSESARPESETEDVLWEDLLHCAECHSSCTSETDVENHQINPC VKKEYRDDPFHQSHLPWLHSSHPGLEKISAIWEGNDCKKADMS VLEISGMIMRNVRNSHIPQIGYQIFGNAVSLILGLTPFVFRLSQA TDLEQLTAAHSASELYVIAFGSNEDIVIILSMVIISFVVRSVLWI FFFLLCVAERTYKQVGIM*TSEGVLNRNRKSHHYKKHYPNEDAPK SGTSCSSRCSSSRQDSESARPESETEDVLWEDLLHCAECHSSCT SETDVENHQINPCVKKEYRDDPFHQSHLPWLHSSHPGLEKISAI WEGNDCKKADMSVLEISGMIMRNVRNSHIPQIGYQIFGNAVSLI LGLTPFVFRLSQATDLEQLTAHSASELYVIAFGSNEDIVIILSMV IISFVVRSVLWIFFFLCVAERTYKQVGIM
5450	8136	1242	GQQFASFFC*NHPEVTVAMALTDIDLQLQFSMSQPEALLLAAG PADHLLLQLYSGHILQVRLVLGQEEQLRQTPAETLSDSIPHTVV LTVVEGWATLSVDGFLNASSAVPGAPLEVPGYGLFVGGTGLGLP YLRGTSRPLRGCLHAATLNGRSLLRPLTPDVEHGCAEFSASDD VALGFSGPHSLAFAFPAGWTQDEGTILEFTLTTQSRQPLAFQAGG RRGDFIYVVDIFEGHLRAVVEKGQGTVLLHNNSPVADGQPHEVSV HINAHRLLEISVDQYPTHTSNRGVLSYLEPRGSLLLGGGLDAEASR HLQEHRLLGLTPEATNASLLGCMEDLSVNGQRGLRALLTRNMA AGCRLEEEEYEDDAYGHYEAFSTLAPEAWPAMELPEPCVPEPGL PPVFANFTQLLTISPLVVAEGGTAWLEWRHVQPTLDMEAELRK SQVLFSTVRAHYGELELDILGAQARKMFTLIDVNVNRKARFIHD GSEDTSDQLVLEVSFTAVERPMPSCLRRGQTYLLPIQVNPVNDPP HIIFFHGSLMVILEHTQKPLGPEVQAYDPDSACEGLTFCVLGT SSGLPVERRDQPGEPATEFSCRELAEAGSLVYVHCGGPAQDLTFR VSDGLQASPPATLKVAIRPAIQUHRSTGLRLAQGSAMPILPAN LSVETNAVQGDVSVLFRVTGALQFGELOKHSTGGVEGAEWATQ AFHQRDVEQGRVRYLSTDPQHHAYDTVENLALEVQVGQEILSNL SFPVTIQRATVWMLRLEPLHTQQTETLTTAHEATLEEAGPS PPTFHVEVQAPRKGNLQLQGTRLSDQGFTQDDIQAGRVTYGA TARASEAVEDTFRFRVTAPPYFSPLYTTFPIHIGGDPAPVLTNV LLVVEPEGGEGVLSADHLFVKSLNSASYLYEVMERPRLGRLAWRG TQDKTTMVTSTFNEDLLRGRLVYQHDDSETTEDDIPFVATRQGE SSGDMAMEEVRGVFRVIAIQPVNDPHAPVQTISRIFHARGGRRLL TTDDVAFSDADSGFADAQLVLTTRKDLLFGSIVAVDEPTRPIYRF TQEDLRKRRVLFVHSGADRGWQIQLQVSDGQHQATALLEVQASEP YLRVANGSSLVVPQGGQGTIDTAVLHLDTNLDIIRSGDEVHYHVT AGPRWCOLVRAQGPATAFSQQDILLGAVLYSHNGSLSPDTEMAF SVEAGPVHTDATLQVTIALEGPLAPLKLVRHKKIYVFQGEAAEI RRDQLEAAQEAVPPADIVFSVKSPPSAGYLVMSRGALADEPPS LDPVQSFSEOEAVDITGRVLYLHSRPEAWSDAFSLDVASGLGAPLE GVLVELEVLPAAIPLEAQNFNSVPEGGSLLTAPLLRVSGPYFPT

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			LLGLSLQVLVEPPQQHGPLQKEDGPQARTLSAFSWMVEEQLIRYVHDGSETLTDIFVLMANASEMDRQSHPVAFVTVLPVNNDQPPILTNTGQLMWEQATAPIAEALRSTDGDGSSEDLVYTIEQPSNGRVVLRGAPGTEVRSFTQAQILDGGVLVFSHRTGLDGGFPFRLSDGEHTSPGHFFRVTAKQKVQLSLKGSGTTLTCPGSVQPLSSQTLRASSAGTDPQLLLYRVVRGPQLGRLFHAAQODSTGEALVNFTQAEVYAGNILYEHEMPPEFWEAHDTLELQLSSPPARDVAATLAVAVSFEAACPQRPSHLWNKNGLWVPEGQRARITVAALDASNLASVSPSQRSEHDFVLVQTVQFPSRGQQLLVSEEPFLHAGQPHFLQSQLAAGOLVYAHGGGTQODGFHFRAHLLQCPAGASVAGPOTSEAFAITVRDVNRPPQPQASVPLRLTRGSRAPISRAQLSVVDPSAPGEIEYEVQRAFHNGFLSLVGGGLGPVTRFTQADVDGRLIAFVANGSSVAGIFQLSMSDGASPPPLPMSLAVDILPSAIEVQLRAPLEVPQALGRSSLSQQLRVRVSDDREEPEAAYRLIQGPQYGHLLVGGRPTSAFSQFOIDQGEVVFAFTNFSSSHDHFRVLALARGVNASAVVNVTVRALLHWAGGPWPQGATLRLDFTVLDAGELANRTGSVPFRILLEGFRHGRVVRVPRARTEPGGSQQLVEQFTQODLEDGRLGLEVGRPEGRAPGPAGDSLTLLELAQGVPPAVASLDFTPEPYNAARPYSVALLSVPEAARTEAGKPESSTPTGEPEGPMASPEPAVAKGFLSFLEAMMFSVIIIPMCVLVLLLAALILPLLFYLRKRNKTGKHDVQVLTAKPRLNGLAGDTETFRKVEPGQAIPLTAVPGQGPPPGQPDPELLQFCRTPNPAALKNGOYWV
5451	1	2274	RDSSEQGRTGDTLGRPSACMDALKPPCLWRNHERGKKDRDSCGRKNSEPGSPHSLEALRDAAPSQGLNFLLLFTKMLFIFNFNLFSPLP TPALICILTFGAAIFWLJITRPQPVLPPLLDLNNSQVGIEGGARKGVSQKNNNDLTSCCFSDAKTMYEVFQRGLAVSDNGPCLGYRKPNQPYRWLSSYKVOSDRAEYLGSCLLHKGYKSSPDQFVGIFAQMRPRWIISELACYTYSMVAVPLYDTLGPEAIVHIIVNKADIAMVICDTPQKALVLIGNVEKGTTPSLKVIILMPFDLKLQRGEKSGIEILSLYDAENLGKEHFRKPVPPSPEDLSVCICTSGTGTGDPKGAMITHQNIVSNAAAFLKCVEHAYEPTPDDVAISYPLAHMFERIVQAVVYSCGARVGFQGDIRLLADDMMKTLKPTLFPAVPRLNRUYDKVQNEAKTPLKKFLKLAVSSKFKELOKGIIHRHDSFDKLIFAKIQDSLGGRRVIVITGAAPMSTSVMFFRAAMGCQVYEAYGQTECTGGCTFTLPGDWTSGHGVVPLACNYVKLEDVADMNYFTVNNEGEVCIKGTNVFKGYLDPEKTOEALDSGDLWHTGDIGRWLPGNGTLKIIDRKKNIFKLAQGEYIAPEKIENIYNRSQPVLQIFVHGESLRSSLVGVVVPDTDVLPSSFAAKLGVKGSSFEELCQNVVREAILEDLOKIGE SGLKTFEQVKAIFIHPPEPFSEENGLLPTLAKRGELSJKYFRTQIDSLYEHIQD
5452	1833	1138	SRVPSSLCLSLSLSLSPSREPVGAGCGTAGPPAMATLWGGLRLGSSLSSLSCLALSVLLAQLSDAAKNFEDVRCKCICPPYKENSHIYNKNISQKDCCDLHVVEPMPVRGPDVAYCLRCECKYEERSSVTIKVTTIYLISIILGLLLYMVYLTVEPILKRLFGHAQLIQSDDDIGDHQPFFANAHDLARSRSRANVNLKVEAQQRWKLQVQEQRKSVFDRHVLS
5453	111	1520	PSIPAAVPQSSAPPEPHREETVTATATSQVAQQPPAAAAPGEGQAVAGPAPSTVPSSTSFKDRPVSPQSLVGSKEEPPARSGSGGGSAKEPQEERSQQQDDIEELETKAVGMSNDGRFLKF DIEIGRGSFKTVYKGLDTETTVEAWCELQDRKLTKSERQRFKEAEMLKGLQHPNI VRFYDWESTVKGKKCIVLVTTELMTSCTLKTYLKRFKVMKIKVLRSWCRQILKGLQFLHTRTPPIIHRLKCDNIFITGPTGSVKIGDLGLLATLKRASFAKSVIGTPFMAPEMYEEKYDESDVYAFGMCMLEMATESEPYSECQNAAQIYRRVTSGVKPASTDKVAIPEVKELIIEGCIRQNKKDERYSIKDLLNHAFHQEEETGVRVELAEDDGEKIAIKLWLRLIKDRLKQKVKDNEAIFSFDLERNVPEDVAQEMVESGVCEGDHHTKTMKAIAKDRVSLIKRKRQRL*
5454	111	1520	PSIPAAVPQSSAPPEPHREETVTATATSQVAQQPPAAAAPGEGQAVAGPAPSTVPSSTSFKDRPVSPQSLVGSKEEPPARSGSGGGSAKEPQEERSQQQDDIEELETKAVGMSNDGRFLKF DIEIGRGSFKTVYKGLDTETTVEAWCELQDRKLTKSERQRFKEAEMLKGLQHPNI

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			VRFYDWSWESTVKGKKCIVLVTLEMTCGTLKTYLKRFKVMKIKVL RSWCRCQILKGLQFLHTRTPPIJHRDLKCDNIFITGPTGSVKIGD LGLATLKRASFAKSIVGTTPEFMAPEMYEKKYDESVDVYAFGMCM LEMATSEYPSECQNAAQIYRRVTSGVKPASFDFKVAIPEVKEII EGCIRONKDERYSIKDLLNHAPPFEEGTGVRLAEEDDGKEIAI KLWLRIEDIKKLKGKYKDNEAIEFSFDLERNVPEDVAQEMVESG YVCEGDHKTMKAIAKDRVSLSIKRKREQRQL*
5455	1359	377	LTMVSPATRKSPLPKVKAMDFITSTAILPLLGCLGVFGFLFRLLQ WVRGKAYLRAVVITGATSGLGKECAKVFYAAAGAKLVLGCRNG GALEELIRELTASHATKVQTHKPYLVTFDLTDGAIVAAAAEL .QCFGYVDIIVNNAGISYRGTTMDTTVDVDKRMETNYFGDVALT KALLPSMIKRRQGHIVAISSIQGKMSIPFRSAYAASKHATQAFF DCLRAEMEQYEIEVTVISPGYIHTNLCSVNAITADGSRYGVMDTT TAQGRSPVVAQDVLAAVGKKKKDVIADLPLSLAVYLRTLAPG LFFSLMASRARKERKSNS
5456	2	2332	CGAGLVAAGAVLVLYPSASRAGERTRVPGSPPAPSSLPLHSFGACG TEVDMDPQRSPSLPELEVKGNIELKRPLIKAPSQPLPLGSRLKRRPD QMEDGLEPEKKRTRGLGATTKITTSHPRVPSPLTVPQTQGQTTA QKVSKKTGPRCSTAIAATGLCNQKPVPAVVPQKSGTSGVFPMAGG KKPSKRPAPWLKGQLCDLNAELKRCRERTQTLDQENQQLQDOLR DAQQKVKALGTERRTLEGHHLAKVQAQAEQGQQELKNLRACVLEL EERLSTQEGLVLQVELQKKQVELQEERRGLMSQLEEKERRLQLTSEA ALSSSQAEVASLRQETVQAQALLTEREERLHGLEMERRLHNQL QELKGNIRVFCRVPVLPGEPTPPGILLFFSGPGGGSDPPTRL SLSRSRDRRGTLSGAPAPPTRHDFSFDRVPVPPGSGQDEVFEEIA MLVQSALDGYPVCIFAYGQTGSGKTFMTMCGPGGDPQLEGLIPR ALRHLFSSVAQELSGQGWTVSFVASYVEIYNETVRDIJATGTRKG QGGECEIRRAAGPGEELTVINARYVPVSCEKEVDALLHLARQNR AVARTAQNERSSRSHSVFQLQISGEHSSRGLOCQAPLSLVLAG SERLDPGIALGPGERLRETOQANSSLSTICLGVIMALSNKESH VPYRNSKLTYLLQNSLGGSAXMLMFVNISPREENVSESLSNLSRF ASKVEPSVLFGTQASNRWKTDPLCVCVCCVCCVCCVCCVCP MSMYRVRRGGRVAGGCFIGWRACPRAIK
5457	2	1540	DDFVERRRWTRTCLVRSPPHPVPGHACSWNGGSLDPLKGTPA LLRSAERLMRKVKLRLDKENTGSWSRSTSINSEGAEERMATTGTP TADRGDAATDDPAARFQVQKHWSDGLRSIIHGSRKYSGLIVNK APHDFQFVQKTDESHPHSHRLYLGMPYGSRENSLLYSEIPKKV RKEALLLLSWKQMDDHQATPHHGVSREEELLRERKRLGVFGI TSYDFHSESGLFLFQASNSLFHCRDGGKNGFMVSPGPGCVSPMK PLEIKTQCSGPRMDPKICPADPAFFSFINNSDLWVANIEGEER RLTFCHQGLSNVLLDDPKSAGVATFV1QBEFDRFTGYWWCPASW EGSEGLKTLRILYEVDESEVEVHVPSPALEERKTDSYRYPRT GSKNPKIALKLAEFQTDQSQGKIVSTQEKEVLQPFSSLFPKVEYI ARAGWTRDGKYAWAMFLDRPQQWLQLVLLPPALFIPSTENEQQA ASLCQSCPQECPAVCGVRGGHQRLDQCS
5458	6642	4022	FVPGILREPQWEPAQPSATMSAPSEEYARLVMEAQPEWLRAEV KRLSHELAETTREKIQAEEYGLAVLEEKHQLKLQFEELDEVYEA IRSEMEOLKEAFGQAHNTNKKVAADGESREESLIQBSASKEQYY VRKVLEIQTTELKQLRNVLNTQSENERLASVAQEKEINQNEI QRGRRLRDDIKEYKFREARLLQDYSELEEEENISLQKQVSVLRQNQ VEFEGLKHEIKRLEEETEYLNQLEDAIRLKEISERQLEEALET LKTEREQKNSLRKELSHYMSINDSFYTSHLHVSLDGLKFSSDDAA EPNNDAEALVNGFEHGGIPLDNKTSTPKKEGLAPPSPSLVS DLLSELNISEIQKLIKQQLMQMEREKAGL LATLQDTQKQLEHTRG SLSEQQEKVTRLTENLISALRRLQASKERQTAIDNEKDRDSHEDG DYYEVEDINGPEILACKYHVAVAAGEELREQLKALRSTHEAREAQ HAEKGRYEAEGQALTEKVSLLAKSRDRELLARLEKELKKVS DVAGETQGSLSLVAQDELVTFSEELANLYHHVCMCNNETPNRVM DYYREGQGGAGRSTPGGRSTSPEARGRSPILPKGLLAPEAGRA DGGTGDSSPGSSLPSPSLSDPRREPMLNIYNLIAIIRDQIKHLQ AAVDRTTELSRQRITASQELGPAVDKDEALMEEILKLKSLSTK

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			REQITTLRITVLKANKQTAEVALNLKSKYENEKAMVTETMMKLR NELKALKDAEATFSSLRAMPATRCDEYITQLDEMQRQLAAEDE KKTLSNLLRMAIQQKLALTQRLLELDEQTRRGRAKAAPKTK PATPSVSHTCACASDRAEGTGLANQFCSEKHSIYCD
5459	316	1262	RGGHRLSGMASNEFDIVKQGVYRIRSRRGLIYQRCWLVFKKASS KGPKRLEKFSDERAAYFRCYHKVTELNNVKNVARLPKSTKKHAI GIYFNDDTSKTFACESDLEADEWCKVLQMECVGTRINDISLGEP DLLATGVEREQSERFNVYLMPSPNLGCGYMGECALQITYEYICLW DVQNPVVKLISWPLSALRRYGRDTTWFTFEAGRMCETEGCLFIF QTRDGEAIYQKVHSAALAIABQHERLLQSVDNSMLQMKMSERA SLSTMVPLPRSAYWQHITRQHSTGQLYRLQDVSSPLKIHRTETF PAYRSEH
5460	45	2097	RPGCRAGELTSGSRARERVRNRVSAPCGQDSRRCDPEVIRGRSP GLGLAEMPSCGACTCGAAAVRLITSSLASAQRGISGGRIHMSVL GRLGTFTQILQRAPIRLRSFTETPAYFASKDG1ISKDGSGDGDKKS ASEGSSKKSGSGNSKGGNQLRCPKGCGDLCTHVTFSSTRFK CEKCHHFFVVLSEADSKKSIKEPESAAEVKLAFAQQKPPPPK KIYNYLDKYVVGQSFACKVLSVAVYNHYKRIYNNIPANLRQAE VEKQTSLTPRELEIRRREDEYRFTKLLQIAQISPHGNALGASMQ QQVNQQIPQEKRGEVLDSSHDDIKLEKSNIILLGPTGSGKILL AQTLAKCLDVPFAICDCCTLTQAGYVGEDIESVIAKLLQDANYN VEKAQQGIVFLDEVDKIGSVPGIHQLRDVGEGVQQGLLKILEG TIVNPEKNSRKLGETVQVDTNLFVASGAFNGLDRIISRRK NEKYLGFGTPSNLKGGRRAAAADLANRSGESNTHQDIBEKRDL LRHVEARDLIEFGMIPEFVGRLPVVVPLHSIDEKTLVQIITEPR NAVIPQYQALFSMDKCELNVITEDALKAIARLALERKTGARGLRS IMEKLLLEPMFEVPNNSDIVCVEVDKEVVEGKKEPGYIRAPTKE SEEEDSGVBEEGWPRQAADS
5461	1481	160	INPPPPPNSPCGRARKWRRRRRPGAPEAAVMELPSGPGLPERLFD SHRLPGDCPPLLVLLLYAPVCFCLLVLRLFLGIHVFLVSCALPD SVLRRFVVRTMCAVLGLVARQEDSGLDRHSVRVLISNHVTPFDH NIVNLLTCSTPLNSPPSVWSRGFMEMNMRGELVESLKRFC ASTRLPPTPLLFPEEEATNGREGLLRFSSWPFSIQDVVQPLTL QVORPLVSVTVSDASWVSELLWSLFPVFTVYQVRNLRPVHRQLG EANEEFALRVQQLVAKELGQTGTRLT PADKAEHMKRQRHPLR QSAQSSFPPSPGSPSPDVQLATLAQRVKEVLPVPLGVIQRDLAK TGCVDLTTTNILEGAVAFAFMEDITKGTQSLPTASASKEPSSGPV TPQPTALTFAKSSWARQESLQERKQALYEARRRFTERRAQEAD
5462	663	3353	KIKERQMSANNSPSQAQKSVLPTAIPAVLPAAASPCCSPKTGLSA RLSNGSFAPSILTNSRGSVHTVSFLLQIGLTRESVTIEAQELSL SAVKDLVCSIVYQKFPECGFFGMYDKILLFRHDNMSENILQLIT SADEIHEGDLVEVPLSALATVEDFQIRPHTLYVHSYKAPTFCDY CGEMLWGLVRQGLKCEGCGLNHYKRCFKIPNNCSGVRKRLSN VSLPGPGCLSVPRPLPOPEVVALPSEESHHQEPSKRIPSWSGRPT WMEKVMVCRVKVPHTFAVHSYTRPTICQYCKRLLKGFLRQGMQC KDCKFNCNKRCASKVPRDCLGEVTFNGEPSLGTDTDIPMDIDN NDINSDSRSGLDDTEEPSPPEDKMFLLDPSDLVERDEEAVKTI SPSTSNNIPLMRVQSIKHTKRSSTMKEGMVHYTSRDNLRK RHYWRLDSKCLTLFQNQESGSKYKEIPLSEILRISSPRDFTNIS QGSNPHCFEIITDTMVYFVGENGNDSSHNPVLAATGVGLDVAQS WEKAIRQALMPVTPQASVCTSPGQGKDHKDLSTSISVSNQCIQE NVDISTVYQIFADEVLGSGQFGIVYGGKHRKTGRDVAIKVIDKM RFPTKQESQLRNEVAILQNLHHPGIVNLCMFETPERVVFVUMEK LHGDMLEMILSSEKSRRLPERITKFMVTQILVALRNLIHFKNIVHC DLKPENVLLASABPFPPQVKLCDFG FARIIIGEKSFRRSVVGTPAY LAPEVLRSKGYNRSLDMWSVGVIYVSLSGTFFPNEDDEDINDQI QNAAFMYPNPWREIISCEAIDLINLLQVQMRKRYSVDKSLSHP WLQDYQTWLDLREFETRIGERYI THESSDDARWEIHAYTHNLVY KHFIMAPNPDDMEEPD
5463	237	1012	LLSVMTTSRCSHILPEVLPDCTSSAAPVVKTVEDCGSLVNGQPQ YVMQVSAKDQGLLSTVVRTLATQSPFNDRPMCRICHEGSSQEDL

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			LSPCETCTGTLGTIHRSCLEHWLSSNTSYCELCHFRFAVERKPRPLVEWLRLNPGPQHEKRTEFGDMVCFLLFITPLATISGWCLRGAVDHLHFSSRLEAVGLIALTVALFTIYLFWTLVLSFRYHCRLYNEWRTNQNLRVLLIPKSNSNVPSNQPSLILGHSVKRNSKETVV
5464	195	677	SPSMNERKKVVDLKLIIVGAIGVGKTSLLHQYVHKTFYEYQTTLGASILSKIII1LGDTTLKLQIWDTGCOERVRSMVSTFYKGSDGCI LAFDVTDLESFEALDIWRGDVLAKIVPMEQSYPVMVLLGNKIDLA DRKYQSILENHLTESIKLSPDQSRSRCC
5465	5278	3348	KGD PREFIRVHREALECDYVSAHLHEWIDLIFGYKQQGPAAVEA VNVFHHLFYEGQVDIYNINDPLKETATIGFINNFGQIPKQLFKK PHPPKRVRSRLNGDNAGISVLPGSTSDKIFFHLDNLRPSLTPV KELKEPVGQIVCTDKGILAVEQNKVLI1PPTWNKTFAWGYADLSC RLGTYE SDKAMTVYCEKLSEWQGQILCAICPNPKLVITGGTSTVVCVWEMGTSKEAKTVTLKQALLGHTDTVTCATASLAYHIIVSGSR DRTCI IWDLNKLSFLTQLRGHRAPVSLCINELTGDIVSCAGTY IHWSINGNPPIVSUNTFGRSQQIICCCMSEMEWDTQNVIWIG HSDGVVPRFWRMEEFLQVLPETPAPAEVLEMQEDCPCEAQIGQEAQ DEPSSDSEADEQSISQDPKETPSQSPSTSRRPRAASCRAFTERQH TDSCGDDDSRRWSQQLSLDEKDGF1FVNYSSEGOTRAHLQGPLSHP HPNPIIEVRNYSRLKPGYRWERQLVFRSKLTMTAFTDRKDNAHPA EVTALGISKDHSRILVGDGSRGVRVFSWSVSDQPGRSAADHWVKDE GGDCSGCSVRFSLTERRHHCRNCOLFCQKCSRFQSEIKRLKI SSPPRVCQNCYVNLQHERGSEDGPRNC
5466	3	992	HACAHASAHASGRLVWRKRRSSVMGIQTSVPVLLASLGVLVTLGLAVGSYLVRRSPQVTLLDPNEKYLLRLLDKTTVSHNTKRF RPALPTAHHTLGLPVGKHIYLSTRIDGSLVIRPYTPVTSDEQGYVDLVIVKYLKGVHPKFPEGGKMSQYLDLSLKVGDVVEFRGPGSL LTYTGKHFNIQPNKKSPPPEPRVAKKLGMIAGGTGITPMLQLIR AILKVPEDPTQCJLLFANQTEKDIILREDLELQARYPNRFKWL FTLDPKDWASYKGFVTADMIREHLPAPGDDVLVLLCGPPPMMVQLAChPNLKDLCYQSKMRFTY
5467	2103	4	GRALRVGTRGCERDLPDQPARIPIQKKDLEEDESVTAALKSRC RSPRKIDQFCNCNSNMVHGSVTRDVAIDFSQEEWECLQPDORTLYRDVMLENYSHLISLAGSSISKPVDVITLLEQEKEPWMMVURKETS RRYPDLELKYGPEKVSPENDTSEVNLPKQVIQISTTLCIEAFY FRNDSEYRQFEGLOGYQEGNINOKMISYEKLPTHTPHASLICNT HKPYECKECGKYFSCGSNLJQHQSIHTGEKPYKCKECKCAFQLH IQLTRHQKFHTGEKTECKECGKAFNLPTQLNRHKNIHTVKKLFBCKECGKSFNRSSNLQTQHQS1HAGVKPYQCKECGKAFNRGSNLJQHQKIHNSNEKPFVCKECGMAFRYHYQLIEHQIHTGEKEFECKE CGKAFTLLTLLKVLRHQKIHGTGEKPFECRECGKAFSSLNQLNRHKNIHTGEKPFECKECGKSFNRSSNLVQHQS1HAGIKPYECKECGKG FNRAHHLIQHQKIHNSNEKPFVCRECEMAFRYHQLIEHRSIHTG DKPFECQDCGKAFNRGSSLVQHQS1HGTGEKPYECKECGKAFRLY LQISQHQKTHTGEKPFECKECGKFFRRGSSNLNQHRS1HTGKPF ECKECGKAFRLHMLIRHQKLHTGEKPFECKECGKAFRLHMQLI RHQKLHTGEKPFECKECGKVFSLPTOLNRIKNIHTGEKAS
5468	225	2976	SFLTDLFQSLAQLENLCKQLYETTDTRLQAELKALVEFTNSPDCLSKCQLLRLERGSSSYSQLLAATCLTKLVLVRTNNPLPLEQRIDI RNYVNLNYLATRPLKATFVTQALIQLYARTTFLGWFDQCKDDYVF RNAITDVTFLQDSVEYCI1GVTILSQTLINEQVNSATAFLIEADTTHPLTKHRKIASSFRDSSLFDITFLSCNLLKQASGKNLNLD ESQHGLIMQLLKLTHNCLNFPIGTSTDESSDLCVQ1PTSWR SAFLDSSTIQLST1TIGRCBVEKTCALLVQLFDQSAQSYQELLQSA SASPMIDIAVQEGRLTWLVYI1GAVIGGRVSFASTDEQDAMGEL VCRVLQIMNLTDSDLRAQAGNEKLELAMLSSFEQFRK1Y1GQVQKSSKLYRRLSEVGLNDFTMVLSVFIGK11TNLKWHGRCEPITS KTLQLLNDLSSIGYSSVRKVLVLSAQPMLNNNHTSEHFSFLGINN QSNLTDMDRCRTTIFYTALGRLLMVLDGEDDQEYEFMLPLTAAFE AVAQMFNSTNSFNEQEAKRTLVLGVLRDGLRIAFAFNAKTSFMMFLWEIYPSYMPILQRA1ELWYHDPACTTFLVLLKMAELVHNRSQLQ

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			FDVSSPONGILLFRETSMKMITMYGNRILTLGEVKDQVYALKLKG ISICFSMLKAALSCSYVNFGVPRLYGDALDNALQTFIKLLLSI PHSDLDDPKLSQSYYSLLEVLTDQDHMFASLEPHVIMYLSS ISEGTLTALDTMVCGCCSCLDKHIVTYLFKQLSRSTKKRTTPLNO ESDRFLHIMQQHPEMIQQMLSTVLNIIIFEDCRNQWSMSRPLIG LILLNEKYFQSDLRNSIVNSQPKEKQQAMHLCFENLMEGIERNLL TKNRDRFTQNLSAFRREVNDSMKNSTYGVNSNDMMs
5469	134	2653	DQEFTSLVPWHLPGWLCSGLLFPVSCLVLLQVASSGNMVKVQ EPTCVDYMSISTCEWKMNQPTNCSTEELRLYQLVFLLSBHTC VPENNGGAGCVCHLLMDVVVSADNYTLDLWAGQQLLWKGSFKPS EHVKPRAPGNLTWHTNVSDTLLTWSPYPPDNLYLNHTYAVN IWESENDPADFRIYNVTYLEPSLRIAASITLKGISYRARVRAWAQ CYNTTWSEWPSTKWHNSYREFEQHLLLGVSVSCIVLAVCLL CYVSIKTKIKKEWWWDQIPNPARSRLVAIIDQDAQGSQWEKRSRGQ EPACKPHWKNCNLTKLLPCFLEHNMKRDEDPHAAKEMPPQGSKG SAWCPVEISKTVLWPEISIVVRCVLFPEAPVECEEVEEVEEKG SFCASPESSRDDFQEGREGIVARLTESFLDLLGEENGFCQD MGESCLLPPSGSTSAAHMPWDEFPSAGPKEAPPWGKEQPLHLEPS PPASPTOSPDNLCTETPLVIAGNPAYRSFSNSLSQSPCPRELG PDPLLLARHLEEVEPEMPCVPQLSEPTTVPQPEPETWEQIILRRNV LQHGAAAAPVSAUTSGYQEFVHAVEQGGTQASAVVGLGPPGEAG YKAFSSLASSAVSPEKCGFQASSGEEGYKFQDLJPGCPGDPA PVPVPLFTFGLDREPPRSPQSSHLPSSSPHEHLGLEPGEKVEDMP KPPLPQEQTADPLVDSLGSICIVYSALTCHLGHLKQCHGQEDGG QTPVMASPCGCCCGDRASPPTPLRAPDPSPGGVPLEASLCPA SLAPSGISEKSKSSSSFHPAPGNAQSSSQTPKIVNFVSVGPTYM RVS
5470	17	1418	TACIRRTSLNRGIAAVKEDAVEMLASYGLAYSLMKFFTGPMSDF KNVGLVFVNSKRDTKAVLCMVVAGAIAAVFHTLIAYSDLGYYI INKLHHVDESVGSKTRRAFLYLAAPPFM DAMA WTHAGILLKHK YFLVGCASTSDVIAQVVFVAILLHSHECREPLLIPILSLYMG A LVRCTTLCGYYKNIHDIPDRSGPELGGDATIRKMLSFWPLA LILATQRISRPINVLFVSRDLGGSSAATEAVAILTATYPVGHMP YGWLTEIRAVYPAFCKNNPSNKLVSTSNTVTAHIKFTFCMA LSLLTCFVMFWTPNVSEKILIDIIGVDFAFALCVPLRIFSFF PVPVTVRAHLTGWLMLKKTFLVAPSSVRLIIVLIAISLVLPYL GVHGATLGVGSLLAGFVGESTMDAIAACYVYRKQKKKMENESAT EGEDSAMTDMPTEEVTDIVEMREENE
5471	1868	658	RSSAPPGPQRAAAATAAAAAAGVEMAAAAAQGGGGEPRTTEGV GPGVPGEVEMVKGQPFDVGPRTYQLQYIGEGAYGMVSSAYDHV KTRVAIKKISPFHQTYCORTLREIQLLRFHRHENVIGIRDILR ASTLEAMRDVYIVQDLMETDLYKLLKSQQLSNHDICYFLYQILR GLKYIHSANVLHRLKPSNLLINTTCDLKICDFGLARIADPEHD HTGFLITYVATRWYAPEIMLNSKGYTKSIDIWSVGCILAEMLS NRPIFGKHYLDQLNHILGILGSPSQEDLNCIINMKARNYQLQL PSKTKVAWAKLFPKSDSKALDLDRMLTFNPNKRTVEEALAH PYLEQYDPTDEPVAAEPFTFAMELDDLPKERLKELIFQETARFQ PGVLEAP
5472	1469	753	LYVMARYLSDEEVAVSIDRLCKANGRSPSIPFGTVRIPGRARVR DPQALWIFGYGSLSVWRPFDAYSDSRVGFVRGYSRRFWQGDTFHR GSDKMPGRVVTLLLEDHEGCTWGVAVQVQGEQVSKALKYLNREA VLGGYDTKEVTFYQPQDAPDQPLKALAYVATPQNPQGYLGPAPEEA IATQILACRGFSGHNLEYLLRVRDVQMQLCGPQAQDEHLAAIVDA VGTMLPCFCPTEQALALV
5473	3	2119	FMNVKLLIQDLEDIEQRVPVMDAQYKIITKTAHLITKESPOEG KEMFATMSKLKEQLTKVKECYSPLLYESQQLLIPLEELEKQMTS FYDSLGLKINEITVLEREAQSSALFKQKHQELLACQENCKKLT LIEKGQSQVQKFVTLNSVNLKHFQTRLQROIAIHVAFOSMVKK TGDWKKHVETNSRIMKKFEESRAELEKVLRIAQEGLEEKGDPPE LLRRHTEFFSQLDQRVLNAFLKACDELTDILPEQEQQGLQEA VR KLHKQWKLQGAEAPYHLLHLKIDVKNRFLASABECRTELDR

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			KLMPOEGSEKIIKEHHRVFFSDKGPHHLCEKRLQLTIEELCVKLKV RDPVRDTPGTCHVILKELRAIDSTYRKLMEDPKWKDYTSRFS EFSSWISTNETQQLKGIGKGEAIDTAHGEVKRAVEEIRNGVTKRG ETLSWLKSRLKVLTTEVSSENEAQKQGDELAKLSSSFKALVTL EVEKMLSNFGDCVQYKEIVKNSLEELISGSKEVQEQAEKILDTE NLFEAQQLLHHHQOKTKRISAKRVDVQQIAQAAQQGEGLPD HEELRKLESTLDGLERSRERQRERRIQVTLRKWERFETNKETV YLFQTGSSHERFLSFSSLESLSSELEQTKEFSKRTESIAVQAEN LVKEASEIPLGPQNKKQLLQQQAKSIKEQVKKLEDTLEBEEYVIDK S
5474	2	780	TPDVQLQASRRGIAVASWCSPRWFAGEEMAFVKSGWLLRQSTI LKRWWKKNWFDLWSDGHLLYYDDQTRQNIEDKVHMPMDCINIRTG QECDRTOPPDGKSKDCMQLQIVCRDGKTTSLCAESTDDCLAWKFT LQDSRTNTAYVGSAVMTDETSVSSPPPYTAYAAPAPEVGRTLS LQQAYGYGPGYGGAYPPGTQVYVAANGQAYAVPYQYPYAGLYGQQ PANQVIIIREYRNDNSDIALGMLAGAATGMALGSLFWVF
5475	2	506	ARGWLESLSLTCTTTPPSSPCLLHSPEFTIHTMPPNLTGYYRF VSQKNMEDYLQALNINISLAVRKIALLKPDKIEHQGNHMTVRTL STFRNYTVOFDVGVEFEEDLRSVDGRKCQTIVTWEEEHLVCVQK GEVPNRGWRHWLEGEMILYLETARDAVCEQVFRKVR
5476	192	1457	SDSMSLLDCFCSTSRTQVESLRPEKQSETSIHQYLVDEPTLSWSR PSTRASEVLCSTNVSHYELQVEIGRGFDNLTSVHLARHTPTGTL VTIKITNLENCCNERLKLAKOQAKAVILSHFFRHPNITTYYWTFTVG SWLWVISPFPYGMASQQLRTRYFPEGMSETLIRNILFGAVRGLN YLHQNGC1HRSIKASHLISGGLVTLGGLSHLHSVLKHGQHR AVYDFPQFSTSVPQWLSPPELLRQDHLHGYNVKSIDIYSGVITACEL ASGQVPFQDMHRTQMILLQKLKGPPYSPLDISIFPQSESRMKNSQ SGVDSGIGESVLUSSGTHTVNSDRLHTPSSKTFSPAFFSLVQLC LQQDPEKRPASSLLSHVFFKQMKEEQSODSILSLLPPAYNKPSI SLPPVLPWTEPECDFPDEKDSDYWEF
5477	3	1044	RGNNSRLYSHEDELQLPRLPELFTGRQLLDEVEVATEPAGSRI VQEKFVKGLDLLEKAAEMLSQQLDSRNEDEEIASTDLYKLLV PAFGQALTMKQVNPSKRLDHLQRAREHFINYLTQCHCYHVAEFE LPKTMNNNAEHTANSSMAYPSLIVAMASQRQAKIQRYKQKKELE HRLSAMKSAVESQGQADDERVREYYLLHLQRWIDISLEEIESIDQ EIKILRERDSSREASTSNSSRQERPEPVKPFILTRNMAQAKVFGA GYPSLPTMTVSDWYEQHRKYCALPDQIAKAAPEEFRKAAQQQE EQEEKEBEDDEQTLHRAREWDDWDKDTHPRGYGNRQNMG
5478	2	835	KTVRIWVPNVKGESTVFRATHATVRSVHFCSDGOSFVTASDDKT VKVWATHRQKFLFSLSQHINWVRCAKFSPDGRLLIVSASDDKTVK LWDKSSRECVCVHSYCEHGGFVTVYDFHPSGTCIAAGMDNTVKW DVRTRHLLQHYQLHSAAVNGLSFHPSGNYLITASSDSTLKILDL MEGRLLYTLHGHQGPATTVAFSRTGEYFASGGSDEQVMVWKSNF DIGDHEVTKVPRPPATLASSMGNLTVSILEQRLTLEEDKLKQC LENQQLIMQ RATP
5479	2	835	KTVRIWVPNVKGESTVFRATHATVRSVHFCSDGOSFVTASDDKT VKVWATHRQKFLFSLSQHINWVRCAKFSPDGRLLIVSASDDKTVK LWDKSSRECVCVHSYCEHGGFVTVYDFHPSGTCIAAGMDNTVKW DVRTRHLLQHYQLHSAAVNGLSFHPSGNYLITASSDSTLKILDL MEGRLLYTLHGHQGPATTVAFSRTGEYFASGGSDEQVMVWKSNF DIGDHEVTKVPRPPATLASSMGNLTVSILEQRLTLEEDKLKQC LENQQLIMQ RATP
5480	444	1952	LSSLTSRMEEAELVKGRILQAITDKRKIQEEISQKRLKIEEDKLKH QHLKKKALREKWLLDGIGSSGKEQEEMKKQNNQQDQHQIQVLEQSI LRLKEIQQDLEKABLQISTKEEATLKKLKSIEERTTEDIITRSVKV EREERAEEIESIDIYANIPDLPKSYIPLSRLRKINEEKEEDDEQNR KALYAMEIKVCKDLKTESTVLSSIPPLSDDFKGTGKIVYDDGQ KSVYAVSSNHSAAYNGTDGLAPAVEVEELLRQASERNNSKSPTEYH EPVYANPFPYRPTTPQRETVPGENFOERIKIKTNGLGIGVNEISI HNMGNGLSEERGNFNHISPIPPVPHPRSIVQQAEEKLHTPQKR

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			LMTPWEESNVMQDKDAPSPKPRPLSPRETIFGKSEHQNSSTCQE DEEDWRYNIVHSLLPDINDTEPVITMIFMGYQQAEDSEEDKKFLT GYDGIIHAELVWIDDEEEDEGEAEKPSYHPIAPHSQVYQPAKP TPLPRKRSEASPEHKKS
5481	3	1422	NSPGSVCLCQCVCPSSLHCLPPLLILLPLLLHESPQPPLARV VATSSDRNFNMNKHQKPVLTGQRFKTRKRDEKEKFEPPTVFRDTLV QGLNEAGDDLEAVAKFLDSTGSRLDYRRYADTLDLFDILVAGSMLA PGGTRIDDGDKTKMTNHCVCFSANEDHETIRNYAQVFNKLIRRKY VLEKAFEDEMKKLLFLKAFSETEQTKLAMLSGILLGNGTLPAT ILTSLFTDSLVEKIAASFAVKLKAWMAEKDANSVTSSLRKAN LDKRLLLELPVNRSVDHFAYKFTDAGLKELSDFLRVQQSLGTR KELQKELQERLSQLBCPIKEVVLYVKEEMKRNDLPETAVIGLLWT CIMNAVEWNKKEELVAEQLAKHLKQYAPLIAVFSSQGQSELJLL QKVQEYCYDNIFHMKAQPKIVVLFYKADVLSEEAILKWKYKEAHV AKGKSVFLDQMKKPVEWLQNABEESEGEEN
5482	1492	528	THVVMTCMCYAPHQVLSYINCVTTSKPGVSIVYSMPSRNISLRL EGLQEKDGSGPVCSNVNQDKQKGSRGHSIKTLELNVLVPAPPSC RLQGVPHVGANVTLSCQSPPSKPAVQYQWDRQLPSFQTFFAPA LDVIRGSLSLTNLSSMAGVVCKAHNEVGTACQCNVILEVSTGP GAAVAGAVVGTLVGLGLLAGLVLLYHRRGKALEEPANDIKEDA IAPRTLWPWKSSDTISKNGTLSSVTSARALRPHGPPRPGALTP TPSLSSQALPSPLPPTDGAHPQPISPIPQGGVSSGSLSRMGAVP VMVPAQSQAGSLV
5483	1	788	FFPFKGCRAGRNSDYRKLEEMHQRFLVSERSRKDDLQLRLTRA ENRIKQLETDSSSEISRYQEMIQKLQNVLESERENCGLVSEQRQL KLQKENKQLRKETESLRKIALEAQKKAKVKISTMEHEFSIKERG FEVQLREMEDSNRNSIVELRHLLATQQKAANRWKEETKKLTESA EIRINNLKSELSRQQLHTQELLSQLEMANEKVAENEKLIJLHQE KANRQLQRLLSQAEERAASASQQLSVITVQRRKAASLMNLENI
5484	3	1997	IMADMEDLGSDADSEAERKDSDSGSDSDSQQENAASGSNASGS ESDQDERGDSGPQSNKELFGDDDEDEGASHHSGSDNHRSERSDNR SEASERSDHEDNDPSDVEDQHSGSEAPNDDDEDEGHRSDGGSHHSE AEGSEKAHSDDKEWGREDKSDQSDDEKIQNSDDEERAQGSDEDK LQNSDDDEKMONTTDEEPRQLSDDERQQLSBEEKANSDDERPVA SDNNDDEKQNSDDEEOPQLSDEEKMQNSDDEPRQASDEEFHRHSDD EEEQDHKSESARGSDDEEVLRMKRNIAASDSEADSDESDTEVPKD NSGTMDFGGADDISSGSDGEDKPPPTPGQPVDENGLPQDQQEEE PIPETRIEVEIPKVNTELDLGNDLYFVKLNELNLSVEPRPFDPQYYE DEFDEEMLDEEGRTRLKLKVENTIRWRIRRDEEGNEIKESNAR IVKWSDGSMSLHLGNEVFDVYKAPLQGDHNHLFIRQGTGLQQA VFKTKLTFRPKSTDSTSATHRKMTLSSLADRCSTQKIRILPMAGR DPECQRTMEMIKKEEERLARSIRRESQORMREKQHQRGLSASYLE PDRYDEEEEGEESISLAAIKNRYKGGIREERARIYSSSDSDEGSE EDKAQRLLKAKKLTSDDEVRPNLFNSRGLSCTQEPTALNEELTDQ AGTN
5485	161	1074	KRKILSSMMDSSEAHEKRPPILTSSKQDISPHITNVGEMKHYLCG CCAAFNNVAITFPIQKVLFRQQLYGIKTRDAILQLRRDGFRNLY RGILQPLMOKTTTALMMPGLYEDLSCLLHKHVSAPEFATSGVAA VLAGTTFATFTPLERVQTLQDHHKHDFTNTYQAFKALKCHGI GEYYRGILVPILFRNGLNSVLFFGLRGPIKEHLPTATTHSAHLVN DFICGGLLGAMLGFLLFFFINVVKTRIQSQIGGEFQSFPKVFQKI WLERDRKLINLFRGAHLNYHRSLSISWGIINATYEFLLKVI
5486	1404	142	IPGSTISWSPAAARGLSVCRCCRLHPASAMDLFGDLPPEPRS PR PAAGKEAQKGPLLFDLPPASSTDGSGGGPLLFDDLPASSGDS GSLATSISQMVKTGKGAKRKTSEEEKNGSEELVEKKVCKASSV IFGLKGYVAERKGEREEMQDAHVLNDITEECRPPSSLITRVSY FAVFDGHGGIRASKFAQNLHQNLIRKFPKGDVISVEKTVKRC LDTFXHTDEEFLKQASSQKPAWKDGSTATCVALVDNLYIANLG DSRAILCRYNEESQKHAALSLSKEHNPOTQYERMRIQKAGGNVR DGRVLGVLEVRSRISGDQYKRCGVTSPDIIRCQLTPNDRFILL

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			ACDGLFKVFTPPEAVNFILSCLDEKTQTREGKSAADARYEAAC NRLANKAVQRGSADINVTVMVVRIGH
5487	535	182	AVSLEQIRCLQTPAPVPLQLQPCPSNCDMERVTLALLLAGLTA LEANDPFANKDDPFYYDWKNLQLSGLICGGLLAIGIAAVLSGK CKCKSSQKQHSPVPEKAIPLITPGSATTC
5488	1072	259	AMAASGEPOQRQWQEEVAVVVVGSCMTDLVSLTSRLPKTGETIH GHKFFIGPGGKGANQCVCQAARLGAMTSMVCKVKGDKDSFGNDYIEN LKQNNDISTEFTYQTKDAATGTASIIVNNEGQNIIVVAGANLLL NTEDLRRAANVISRAKVMVCOLEITPATSLAELTMARRSGVKTL FNPAPAPIADLDPQFYTLSDVPCNESEAEILTGLTVGSAADAGE AALVLLKRGCOVVIITLGAEGCCVVLSQLTPEPKH1PTEKVKAVD TTVSFKI
5489	81	893	GKGPAVAAFDQSNIFLTDPKIFLGQWREEPKMPLLLGETEPLK LERDCRSPVEPWAAASPDLAACLCQDLSGAFPNRGVLGGV LFPTVEMVIKVFVATSSGSIAIRKKQQEVVGFLEANKIDFKELD IAGDEDNRWMRENVPGEKKPQNGIPLPPQJFNEEQYCGDFDSF FSAKBENIIYSFLGLAPPDSDKGSEKAEGGETEAQKEGSEDVG NLPEAQEKNEEEGETATEETEEIAMEGAEGEAEEEEETAEGEEP GEDEDS
5490	81	893	GKGPAVAAFDQSNIFLTDPKIFLGQWREEPKMPLLLGETEPLK LERDCRSPVEPWAAASPDLAACLCQDLSGAFPNRGVLGGV LFPTVEMVIKVFVATSSGSIAIRKKQQEVVGFLEANKIDFKELD IAGDEDNRWMRENVPGEKKPQNGIPLPPQJFNEEQYCGDFDSF FSAKBENIIYSFLGLAPPDSDKGSEKAEGGETEAQKEGSEDVG NLPEAQEKNEEEGETATEETEEIAMEGAEGEAEEEEETAEGEEP GEDEDS
5491	204	1194	GSAPRSLSGPTGAQARDPWWARPPSKPYTQSKEDRPDTEGRSE QGDMASSFLPAGAITGDSGGELSSGDSGEVEFPHSPEIETSC LAELFEKAHHQLQGLIQVASREQLLYLARYKQVKVGNCTNPKP SFFDGKQKWEAWKALGDSSPQAMQEYIAVVKLDPGWNPQI PEKKGKEANTGFGGPVISSSLYHEETIREEDKNIFDYCRENNIDH ITKAIKSKNVDVNVDKDEEGRALLHWACDRGHKELVITVLLQHRAD INCQDNEQGTALHYASACEFLDIVELLQSGADPTLIRDQGCLP EEVTGCKTVSLVLRHTTGKA
5492	3	1896	ASKNPLSAVCTGIMSSLAVRDPAMDRLSRLSVFVGNIPYEATEE QLKDIIFSEVGSVVSFRLVYDRETGKPKGYGFCEYQDQETALSAM RNLNKGREFSGRALRVDNAASEKNEELKSLGPAAPIIDSPYGDP IDPEDAPESITRAVASLPPEQMELMKQMLCVQNSHQEARNML LQNPQLAYALLQAQVVMRIMDPEIALKILHRKIHVTPLIPGKSQ SVSVSGPGPGPGPGLCPGPNVLLNQNPPAPQPQHLARRPVKDI PPLMQTPIQGGIFAPGPPIAAVPGAGPGSLLPGGAMQPQLGMPG VGPVPLERGQVQMSDPRAPIPRGPVTPGGIPLPRGLGDAPNDPR GGTLLSVTGEVEPRGYLGPQPHQGPMHHASGHDTRGPSSHEMRG GPLGDRLLIGEPRGPMIDQRGLPMGDRGGRDSRAMETRAMETE VLETRVMERRGMETCAMETRGMEARGMDARGLEMGRGPVSSRP MTGGIQCQGPINICAGGPPQGPQPGPQVPGISGVGNPGAGMCGTGIQ GTGMCQGAGIQGGGMQGAGIQGVSIQGGGIQGGGIQGASKQGGSQ PSSFSPGQSQVTQDQEKAALIMQVLQLTADQIAMLPEQRQSI LILKEQIOKSTGAS
5493	1	1876	RAPMMITKAVPPEEPRPKGRLTQALNSPLTWEHVWICVPGCPTDCL TDTFRVKRPHLRRSASNGHVPGPVYREKEDMYDEIEIELKKSLSH VQKSDVDRAMRTKLRLLEENSRKDRQIEQLLDPSRGTDFTVRLA EKRPDASWVINGLKQRILKLEQOCKEKDTISKLOTDMDKTTNLE EMRIAMETYYEEVHLQTLASSSETTGKKPLGEKKTGAKRKMM GSALLSLSRSVQELTEENQSLKEDLDRVLSTSPTISKTOGVVREW SKPRLRRIVELEKKL SVMMESSKSHAAEPVRSHPPACLASSAL IHPGPRGDRNKDHERLRAVRLKEERTALQEQLQRDLEVQKLL QAKADLEKELECAREGEEREERRREEVLRREEIOTLTSKLOEIQEM KKEEKEDCPEVPHKAQELPAPTPSSRHCEQDWPPDSSEEGLPRP RSPCSDGRDAAARVLQAQWNKVKYHKKKKAVLDEAAVVLQAARF

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			GHLTRTKLЛАSKAHGSEPPSPVPLPDQSSPVРVPSPIAQATGS PVQEAEAVITIQSALRAHLARARHSATGKRTTTAASTRRRSASAT HGDASSPPFLAALPDPSPSGPQAVAPLFGDDVNSDDSDIVIAP SLPTKNFPV
5494	71	536	RSKAKIGTPTRVPSTDMKVRESSSSLTHRPAрSPATPRLLGT RRVLLGVSEGTCADAMELVLVFLCSLLAPMVLASAAEKEKEMD PFHYDYQTTLRIGGLFVAVVLFSVGILLILSRRCKCSFNQKPRAP GDEEAQVENLITANATEPQKAEN
5495	273	2168	DSLLIQVDTMPFTLHLRSRLSEAIRSLILQKKPNIRNTSSMAG ELRPASLVLVPLRSLAPAFERFCQVNTGPLPLQOSEPEKWMILPP QGAISETRMCHPQFWKYEFQACTGSLASLEQYSEQLKDMVAFFL GCSFSLEEALEKAGLPRRDPAHGHSQAGAYKTVPCVTAGFCCP LVVTRMRPIPDKDLEGLVRACCSLGGEQCPVHMGDPELLGKEL SKPAYGDAMVCPPGEVVPFWPSPLTSLGAVSSCETPLAFASIPG CTVMTDLKDAKAPPGLTPERIPEVHHISQDPLHYSIASVSASQ KIRELESMSGIDPGNRGICHLLCKDELLKASLSLSHARSVLITT GFPTHFNHEPEETDGPPGAVALVAFLQALEKEVAAIVDQRAWN LHQKIVEDAVEQGVLKQTQIPILTYQGGSVAAQAFLCKNGDPQT PRFDHLVAIERAGRAADGNYYNARKMNIIKHLVDPIDDLFLAAKK IPGISSTGVGDGGNELGMGKVKEAVRRHIRHGDVIACDVEADFA VIAGVSNWGGYALACALYIILYSCAVHSQYLRAVGPSPRGDQA WTQALPSVIKEEMLGILVQHKVRSVGSIVGMEVDGLPFHNTH AEMIQKLVDVTTAQV
5496	3	2408	QDTKMHEIYKGNCITPQLNKNTLKTSAATDVWAVYFSQFWIDYEG MKSGKGRPISFVDSFPPLSIWICOPTRYAESQKEPOTCNQVSLNT SQSESSSDLAGRLKRKLLLKEYYSTESEPLNTGGQKPSSSDTFFR FSPSSSEADIHLLVHVHKVSMQINHYQYLLLLFLHESLILLSE NLRKDVEAUTGSPASQTSICIGILIRSABALLLHPVDQANTLK SPVSESVSPVPPDYLPTENGDFLSSKRKQISRDINRIRSUTVNH MSDNRSMSVDSLHPILKDPPLLFKSASDTNLQKGISMFDYLSDKH LGKISEDESSGLVVKSGSGEIGSETSDKDSFYTDSSSVLYRE DSNLSFSDGQNQNILSSTLTSKGNETIESIFKAEDLLPEAASL SENLDISKEETPPVRTLKSQSSLGSKPKERCPPNIALPLCVSYKN MKRSSSOMSLDTISLDSMILEEQLLESDGSDSHMFLEKGNNKNS TTNYRGTAESVNAGANLQNYGETSPDAISTNSEGAQENHDDLMS VVVFKITGVNGEIDIRGTEICLQVNQVTPDQLGNISLRHYLC NRPVGSDQKAVIHSKSSPEISLRFESGPAGVHSSLAEKNGLFQ CHIKNFSTEFLTSSLNMNIQHFLEDETATVMPMKIQVSNTKINL KDDSPRSSTSLEPAPVTVHIDHLVVERSDDGSFHIRDSHMLNT GNDLKBENVKSDSVLILTSGYDLKKQRSVTQATQTSPGVPWPSQS ANFPEFSFDFTREQLMEEENESLKQELAKAKMALABAHLEKDALL HHIKMTVE
5497	1821	3308	SISKLLKRRSNIDAYLLSNSCAFFAPRLFSLASQTIREQQSPNV CFIYKYSGFPSLECOCHFVSPHSSCYINFFSFPPFFFVCFQLSN GFSHYSLSSES HVGPTGAGLFPHCLPASRLLPRVTSVHLPDYAH YYTIGPGMFPSQI PWSWKDWAKPGPYDQPLVNTLQRRKEKREPD PNGCCPTTASGPAAAEEAQRPRSMVTSAATRPCBEMEACEELA LALSRLQLDTQRSSRDSLQCSSGYSTQTTPCCSED TIPSOVS DYDYFVSGDQEADQFDKKSSTI PRNNSDISQSYRRMFQAKRPA STAGLPTTLLGPAMVTPGVATIRRTPTKPSVRRGTTIGAGPIPK TPVIVPKTPTVDPDLPGLVLPAPPDGPEERGEHSPESPVGEGPQG VTSMPSSMWSGQASVNPLPLGPKPSIPEEHROQAIPESEAEDQBR EPPSATVSPGQIPESD PADLSPRDT PQGEDMLNAIRRGVKLKKT TTNDRSAPRFS
5498	2434	1492	IITHQEIFTGEKPCECGKASTIQMSHLQQKIYSGENPFACKVCG KVFHKSNLNEHEHFHTREKPFECNECGKAFSQKQYVIKHQNTH TGEKLFECNECGKFSQKENLLTQKIHGTGEKPFECKDCGKAFI QKSNLIRHQRHTGKEKPFVCKECGKTFSGKSNLTEHEKIHIGEK PFKCSCEGTAFGQKKYLIKHQNIHTGEKPYECNECGKAFSQRTS LIVHVRHSGDKPYECNVCGKAFSQSSSLTVHVRSHTGKPYGC NECGKAFSQFSTLALHLRIHTGKPKYQCSECGKAFSQKSHHIRH

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			QKITHH
5499	324	926	GFGQICRGHKITTYPFSPRSKSGRKGMQAQSQGWVKRYIKAFCKGF FVAVVPVAVTFLDRVACVARVEGAGSMQPSSLNPGGSQSSDVULLNH WKVRNFEVHRGDIVSLVSPKNPEQKIIKRVIALEGDIVRTIGHK NRYVKVPRGHIVWEGDHHGHFSNSFGPVSLGLLHAHATHILW PPERWQKLESVLPPERLPVOREEE
5500	1978	1286	KPDWRLQNLFFPRLYLWRSSRFGGHKLKKRQLQDFKIEHTWDGFP VKHEPVFIRLNPGDRGVMMDISAPFFRDPPAPLGEPGKPFWELW DYEVVEAFLNDITEQYLEVELCPHGGQHLVLLSGRRNVWKQEL PLSFRVSRRGETKWEKGAKYLPPWSYFPNPNTKENSFAIHGSKDKRS YEALYPVPQHELQOQGQPKPDFHCLEYFKSFNFNTLLGEEWKQPES DLWLIEKCDI
5501	2927	2226	CRPPVSARVAPGHQGAVGGSGRPARVERVVDAAARPSSRPFSLP AAIMLALISRLLDWFRLSRFLWKEEMEMLTVLGLQYSGKTTFVNIA SGQFSEDMIPTVGFNMRKVTKGNVTIKIWDIGGQPRFRSMWERY CRGVNAIVYMDAADREKIEASRNELHNLLDKPQLQGIPVVLG NKRDLPNALDEKQLIEMNLSAIQDREICCYSISCKEDNIDIT LQWLIOHSKSKRSRS
5502	3	824	NSAFFVWVPERTALLTCPLGAAPGSSREAPGIAGPPNSTAMSKL GKFFKGGGSSKSRAAPSPQEALVLRTEBMLGKKQBYLENRTO REIALAKKHGTQNKRKAALQALKRKRFEKQLTQIDGTLSTIEFQ REALENSHTNTTEVLRNMGFAAKAMKSVHENMDLNKIDDLMQEIT EQODIAQEISEAFTSQRVCFGDDFDEDELMAELELEQEELINKKM TNIRLPNVPSSSLPAQPNRKPGMSSTARRSAASSQRAEEDDD IKQLAAWAT
5503	216	654	KGVRRGRVRSDSEDSHLGYFKMSFLLPKLTSKKEVDQAIKSTA EKVLVLRFGRDEDPVCLQLDDILTSKTSDSLKMAAIYLVDVDQT AVYTQYFDISIYIPTSTVFFFNGQHMVKVDYGGEDPALRSIKAVRRT SPAGTILGEKPVNS
5504	58	3563	QLSFSFQAPTFDITVYLLQEWVLLSQOKELCGSNKLVAPL GPTVANPFLFRKPGPGRGPFWLGGSVQGQRSLLEHPGKKQMGYMG EMEVCGPTRESQGSLSPKKAYLSHLSTGSGHIEGDWAGRNRKL LKPRSIQKSWFVQFPWLIMNEEQTALFCSACREYPSIRDKRSRL IEGYTGPFKVETLKYHAKSKAHMFCVNALAARDPIWAARFRSIR DPPGDVLASPEPLTADCPIFYPPGFLGGFDSSMAELLPSRAEL EDPGGDGAIPAMYLDCTISDLRQKETTDGIHSSSDINILYNDAVE SCIQDPSAEGLSEEVPPVFEELPVVFEDVAVYFTREEWGMLDKR QKELYRDVMRMNYELLASLGPAAKPDLISKERRAAPWIKDPM GPKWGKGRPPGNKKNVAVREADTQASAADSALLFGSPVEARASC CSSSICEEGDGPRRIKRTYRPRSITQRSWFGQQFPWLVIDPKETKL FCSACIERPNLHDKSSRLVRGYTGPFKVETLKYHEVSKAHLRCV NTVEIKEDTPHTALVPEISSLDMANMEHFFNAASIAYHSRPLN DFEKILQLLQSTGTVILGKYRNTACTQFIFYISETLKRILED VRNSPCVSVLLDSTSASEQACVGIYIRYFKQMEVKESYITLAP LYSETADGYFETIVSALDELDIIPFRKPGWWVGLGTDGSAMILSCR GGLVKEKFQEVIQQLPVPVCVAHRLHLAVVDACGSIDLVKKCDRH IRTVFKFYQSSNKRNLNEQEGAAPLEQEIIIRLKDLNARWVASR RRTLHALLVSWPALARLHQRVAAEAGGQIGHRAKSMKLMRGHF VKFCFHFLDFLSIYRPLSEVCQKEIVLITEVNLGRAYVALES LRHQAGPKEEEENASFKDGRHLGICLKDLEVABQRQFQADRERTV LTGIEYLQQRFDADRPQLKNMVEFDTMAWPSPGIELASFGNDDI LNLARYFECSSLPTGYSEEALLEEWGLKTIAQHLPFSMLCKNAL AQHCRFPPLSKLMAVVVCPISTSCCERGFKAMNRIRTDERTKL SNEVLNMLMMTAVGAVTEYDPQPAIQHWYLTSRGRRFSHVYT CAQVPARSPASARLKEEMGALVVEEPRTQKPPILPSREAEBVL KDCIMEPPERLLYHPTSQEAPGMS
5505	3312	1219	NCSPRSLSAKMSNRRNNNKKLPSNLQNLKRDPPAYIEEFLQ QYNHYKSNSVEIFKLPQPKPSKELAELVMFMAQIISHCYPEYLSNF PQEVKDLLSCNHTVLDPPDLRMTFCKALILLRNKNLINPSSLEL FFELFRCHDKLLRKTLTHIVTDIKINIAHKHKNKVNVLQNF

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			YTMRLDSNATAAKMSLDVMIELYRRNIWNDAKTVNVITACFSK VTKILVAAALTFFLGKDEDEKQDSDSESEDDGPTARDLLVQYATG KKSSKNKKKLEKAMKVLKKHRRKKKPEVFNFSAIHLIHDQDFA EKLLKQLECCKERFEVKMMLNMNLISRLVGIHELFLFNFYPPFLQR FLQPHOREVTKILLFAQASHHLLVPPEIIQSLLMTVANNFVTDK NSGEVMTVGINAIAKEITARCPTEELLQDLAQYKTHKDKNVM MSARTLIHLFRTLNPQMLQKKFRGKPTEASIEARVQEYGELDAK DYIPGAEVLEVKEENAENDEDGWESTSLSEEEDADGEWJDVQH SSDEEQQEISKKLNSMPMEERAKAAAISTSRVLTQEDFQKIRM AQMRKELDAAPGKSQKRKYIEIDSDEEPRGELLSLRDIERLHKK PKSDKETRIATAMAGKTDRKEFVRKKTKTNFSSSTNKEKKKQK NFMMMRYSQNVRSKNKRSPREKQLALRDALLKKKRMK
5506	1	1531	FRGDLCGQRGGSAPGEGGSAAWPAPAHEPLDREREREALCPGRS CSGGGGEETPGTTPVWSPLEGGGDEELRPNPYVRFPYRWWAVVV LAAPFSLGLGAGGETPEAPPESWTQLWFRRFVVNAAGYASFMVPGY LLVQYFRRKNYLETGRGLCFPLVKACVFGNPFKASDEVPLAPRT EAAETTPMWQALKLFCATGLQVSYLTWGVQLQERVMTRSYYGATA TSPGERFTIDSQFLVLMNRVLALIVAGLSCVLCQPRHGAPMYRY SFASLSNVLSWCQYEALKFVFSPTQVLAASKVIFVMLMGKLV SRRSYEHWELTATLISIGVSMFLSSGPEPRSSPATLTLCLIL LAGYIAFDTSFTSNWQDALFAYKMSHVQMMFGVNFFSCLFTVGSL LEQGALLECTRFGMRHSEFAHALLLSICSGQLFIFYTIGQF GAAVFTIIMTLRQAFAILLSCLLYGHVTVVGGLGVAVVFAALL LRVYARCRKLQRGKAVPVESPVQKV
5507	3704	1271	PRGTRRCRCPAGRASRARRRPPCPGPAPGSLEIGGF GTAAGKK VAVADQVQFGPMRFHQDQLQVLVLFVTKEDNOCNGFCRACEKAGFK CTVTKEAQAVLACFLDKHHDTIIDHRNPRQLDAEALCRSIRSS KLSENTVIVGVVRRVDREELSVMPFIISAGFTRRYVENPNIMACY NELLQLEFGEVRSQQLKLRA�NCSVFTALENSEDAIEITSEDRFIQ YANPAFETTMGYQSGLIGKELGEVPINNEKKADLLDTINSCIRI GKEWQGIYAKKNGDNIQQNVIIPVIGQGGKIRHYVSIIIRC NGNNKAKEKISECVQSDTHTDNQTGKHKDRRKGSLDVKAVASRAT EVSSQRRHSSMARITHSMTIEAPITKVINIINAAQESSPPMVTEA LDRVLEILRTTELSPQFGAKDDDPHANDLVGGLMSDGLRRLSG NEYVLSTKNTQMVSSENITPIISLDDVPRIARAMENEYWDFDI FELEAATHNRPLIYGLKMFARFGICEFLHCSESTLRSWLQIIE ANYHSSNPYHNSTSADVLHATAYFLSKERIKETLDPIDEVAAL IAATIHDVDHPGRNTSFLCNAGSELAIILYNDTAVLESHHALAF QLTTGDDKCNIKFKNMERNDYRTLROQGIIDMVLATEMTKHFEHVN KFVNSINKPLATLEENGETDKNQEVINTMLRTPENRTLIKMLI KCADVSNCRPLQYCIWAAARISEEYFSQTDEEKQQGLPVMPV FDRNTCSIPKSQISFIDYFITDMFDAWDAFDVLDPLDLMQHLDNNF KYWKGLDEMKLRLNLRPPB
5508	1151	691	LSSVFSRSASMFAVGCSMGPFLHYWYLSLDRLFPAASGLRGFPN VLKKVLVDQLVASPLLCVWYFLGLGCLEGQTVGESCOELREKFW EFYKADWCVWPAQQFVNLFVPPQFRVTYINGTLGWDTYLSYL KYRSPVPLTPPGCVALDTRAD
5509	1238	619	RKSRGCONALSASGPAAAIAIMVRKLKFHEQKLLKQVDFLNWE VTDHNLHELRVLRYRLQRREDYTRYNQLSRAVRELARRLRLP ERDQFRVRASAALLDKLYALGLVPTRGSLLELCDFTASSFCRRR LPTVLLKLRMAQHILQAAVAFVEQGHVVRVGPDVVTDP AFLVTRSM EDFVTWVDSSSKIKRHLEYNEERDDFDLEA
5510	96	1195	PAGAHLSGSSEPLIPEVPGRRGVGARVKGERGLQASGSAPGRSKM AEGERQPPPDSSSEEAPPATQNFIIIPKKEIHTVPDFMGKWKRSQAY ADYIGFILTLNEGVKGKLTPEYRVESEAIEKLVALLNTLDRWID ETPPVDPQPSRFGNKAYRTWAKLDEERAENLVATVVPHTLAAAVP EVAVYLKESVGNSTRIDYGTGHEAFAFLCCLCKIGVLRVDDQ IAIIVPKVFNRYLEVMRKLQKTYRMEEPAGSQGVWGLDDFQFLPFI WGSSQLIDHPYLEPRHFVDEKAVNENHKDYMFLCILFITEMKT GPFAEHNSNQLWNISAVPSWSKVNQGLIRMYKAECLEKFPVIQHF KFGSLLPPIHPVTSQ

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5511	276	1980	KLSRVLNLPPENLITSISAVPISQKEEVADFQLSVDSLLEKDND HSREDIQVQAKRIAEKLRCDTVVESEISTGQRTVNFKINRELLTK TVLQQVIEDGSKYGLKSELFSLGPQKKKIVVEFSSPNVAKKFHVG HLRSTIIGNFIANLKEALGHQVIRINYLGDWGMQFGLLLGTGFQL FGYYEKLQSNPLQLHFVFEVYVQVNKEAADDKSVAKAAQEFFFQRLE LGDVAQLSLWQKFRLDSLIEEYIRVYKRLGVYFDEYSGESFYREK SQEVKLKLESKGLLLTKIGTAVVDSLGNGDPPSICTVMRSDGT SLYATRDLAAAIDRMKDYNFDTMIVYTDKGQKKHFQQVFQMLKI MGYDWAERCQHVPGVVGQMKTRRGDVTFLEDVLNEIQLRMQN MASIKTTKELKNPQETAERVGLAALIIQDFKGLLLSDYKFSWDR VFQSRGDTGVFLQYTHARLHSLEETFGCGYLNDFTNTACLQEPQS VSILQHLLRFDEVLYKSSQDFQPRHIVSYLLTLSHLAAVAKHTL QIKDSPPEVAGARLHLFKAVRSVLANGMKLIGTPVCRM
5512	120	1015	DPSLLLTITVTGTVLVLVLSMSRRREPITLQDPPEAKYPLPL IEKEKISHNTRRFRFGLPSPDHLVLPVGNGVOLLAKIDNELVV PAYTPVSSDDDRGFDVLIIK1YFKNVHPQYPEGGKMTQYJENMK IGETIFGRGPRGRLFYHGPGLGIRPDQTSEPKTLADHLMIA GGTGIPMQLIRHITKDPDSRTRMSLIFANQTEEDILVRKELE EIARTHDPQFDLWYTLDRPPIGWKYSSGFVTADMIKEHLPPIAK STLVLCGPPPQIOTAHHPNLEKLGYTQDMIFTY
5513	2	837	ARWLPSPDSPRIPPAGETPGRGSCRNVLPSSESSPPPEPSSFPS PPTSRRGGPGSRDTSMDSEESQDRLKIVVLLGDGASGKTSLLTC FAQETFGKQYKQTGFLDFLRLITLPGNLNVTLQIWIDGGQTIG GKMLDKYIYGAQGVLLVYDITNYQSFENLEDWYTVVVKVSEEESE TOPLVALVGNGKIDLEHMRTIKPEKHLRFCQENGFSHHFVSAKTG DSVFLCFQKVAAEILGIKLNAKIEQSQRVVKADIVNYNQEPMS RTVNNPRSSMCAVO
5514	1295	449	VNRPSWIMGNFRGHALPGTFFFFIIGLWWCTKSILKYICKKKRRT CYLGSKTLYFRLEILBGTIVGMALTGMACEOPIPGGPHLMLYD YKQGHWNQLLGWHHFTMYFFGILLGVADILCFTISSLPVSLTKL MLSNALFVEAFIIFYNHHTGREMLDIFVHQLLVLVVFLLTGLVAF EFLVRRNNVLLLELLRSSLLQGSWFFQIGFVLYPPSGGPWADLM DHENILFLTICFCWHYAVTIVIVGMNYAFITWLVKSRLKRLCSS EVGLLKNAEREQSEEEM
5515	1572	260	FVRLVGRGDCDPLSVCLTTMPLYEGLGSGGEKTAVIDLGEAF TKCGFAGETGPRCIIPSVIKRAGMPKPVRVQYNINTEELYSYL KEFIHILYFRHLLVNPRDRRVVIIIESVLCPSHFRETLTRVLFKY FEVPSVLLAPSHLALLTLGINSAMVLDGYRESLVLPIYEGIP VLNCWGALLGGKALHELETLQLEQCTVDTSVAKEQSLPSVNG SVPEGVLEDIKARTCFVSDLRKGLKTOAKFNIDGNNERPSPPP NVDPYPLDGEKILHILGSIRDVSVEILFPEQDNEEQSVATLILDSL IQCPIDTRKQLAENLUVVIGGTSMLPGFLHRLLAEIRYLVEKPKY KKALGTTKTFRIHTPPAKANCVAWLGGAIFGALQDILGSRSVSKE YYNQTGRIPDWCSLNNNPLEMMFDVGKTQPPIMKRAFSTEK
5516	3	735	NSREPPQAGCPSPSRKSGPTASSFLFPWRPLASSFWNGAQAQES IKAMWRVEGTTTTRRPVITGESPGLPMRPEAMLLLTLALLGGPTWAG KMYGPGGGKYFSTTEDYDHEITGLRVSGLLVLVKSQVVKLGDSW DVKLGALGGNTQEVTLDQPFGEYITKVFVAQFAFLRGMVMTSKDR YFYFGKLDGQISSAYPSQEGQVILGQYQQLGIKSIGFEWNY PLEPTTEPPVNLITYSANSPVGR
5517	246	499	SEIYVAMRTDSSKMTDVESGVANFASSARAGRNNALPDIQSSAA TDGTSIDLPLKLEALSVKEDAKEKDEKTTQDQLEKPQNEEK
5518	3	1375	DAWADAWRRAWDLNNDFPCCLWLGLLLPLVAAIDFNYHROEGMEA FLKTVQANQYSSVTIHLHSIGKSVGRNWLWVGRFPKEHRIGIP EFKYVANMHGDETGVGR3LLLHLIDLYLVTSDGKPEITNLINSTR IHIMPSMNPDGFEAVKPKDCYYSIGRENEYNQYDLNRNFPDAFBY NNVSRQPETVAVMKWLKTETFVLSANLHGGALVASYPFDNGVQA TGALYRSRSLTPDDDFVQYLAHTYASRNPNMKKGDECKNKMNFPN GVTNGYSWYPLQGGMQDYNYIWAQCFCITLELSCCKYPREEKLP SFWNNNKASLIEYIKQVHLGVKGQVFDQNGNPLPNVIVEVQDRK

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			HICPYRTNKYGEYVYLLLPGSYIINVTVPGHDPHITKVIPEKSQNFSALKDILLFPGQQLDSTPVSNPSCPMLYRNLDPDSAATKPSLFLFLVSLHHIFFK
5519	87	477	IKSKLNQQVEVQESEWRLEAKGPTMGKESGWDSGRAAVAAVGCVVAVGTVLVALSAMGFTSVGIAASSIAAKMSTAIAANGGGVAAGSLVAILQSVCAGLSVTSKVGFFAGTALCGAWLGSPPPS
5520	117	943	PTEGRQKVLTFTVPRSLAMTKTSTCIYHFLVLSWYTFLNYYISQEGKDEVKPKILANGARWKYMTLNNLLQTIFYGVTCDDVLKRTKGKDKIFLTAFRDLLFTTIAFPVSTFVLAFLWILFLYNRDLTYPKVLDTVIPVWLNMHAMHTFIPPIPTLAEVVLRPHSYPSKKTGLTLLAASIAIAYISRLWLWYFETCTWVYPPVFAKLSSLGLAAPPFSLSYVFIASIYLLGEKLINHWKVVSVQILQRWRLESVGICFCQWPDWKSPAKHQLVKNIR
5521	546	911	KILNMQKSCEENEGKPQNMPKAEDRPLEDVPQEAEGNPQPSEE GVSQEAEQGNPRCQPNQPGQGPKEDETPVVRHLDEEMIRGVDELERLREEIRRVRNKFVMMHWKQRHSRSRPYPVCFRP
5522	1224	637	GSRPLGQRSREKMWWFGYGSLSIWKVDPYQDKLVGYITNYSRWFQGSTDHRGVPGPKGRVVTLVEDPAGCVWGVAYRLLPVGKEEVKAYLDREKGGYRITTIVFYPKDPTTKPFSVLLYIGTCNDPDLG PAPLEDIAEQIFNAAGPSGRNTEYLFLELANSIRNLVPEEADEHFLALEKLVKERLEGKQNLNCI
5523	3	1280	SKGKRMGSSMSAATARRPVFDKEDVNFDHFQILRAIGKGSFGKVICVQKRDTKEMYAMKYMNKQQCIERDEVRNVFRELELLOEIEHVFLVNLWYSQDDEEDDMFMVVDLLLLGGDLRYHLQQNQFSEDTVRLYICEMALADLYLRGQHIIHRDVKPDNILLDERGHAHLTDFNIATIIKDGERATALSGTKPYMAPEIFHFSFVNNGGTGYSFEVDWWSVGVMAYELLRGWRPYDIHSSNAVESLVQLFSTSVQYVPTWSKEMVALLRKLLTVNPHEHRLSSLQDQVAAPALAGVLWDHLSERKVEPGFVPNKGRLHCDPTFELEEMILESRPLHKKKKRLAKNKSRDNSRDSSQSENDYIQDCDAIQQDFVIIFNREKLRKSQDLPREPLPAPERSRDAAEPVEDAERSALPMCGPICPSAGSG
5524	85	2319	RERERDHRPGESSQGOSGAGGCFPSPMTBLRCGGLLFSSRFDSGNLAHVEKVESLSSDGEVGAAAALSNTSGIASSPDYEFNWRPDCAETEFENGNRSWFYFSVRGGMPGKLIKINIMNMNKQSKLYSQGMAPFVRTLIPTRPRWERIRDRTPFEMTTQFVLSFVHRFVEGRGATTFFAACFCYPSYSDCQELLNQLDQRFPEHNPHTSSPLDTIYYHRELLCYSLDGLRVDLLTITSCHGLREDREPRLEQLFPDTSTRPFRFAGKRIFFLSSSRVHPGETPSSFVFNGLDFILRPDDPRAQTLRRLFVFKLIPMLNPDGVRGHYRTDSRGVNLRNQYLPDAVLHPAIYGAKAVLLYHHVHSRILNSQSSSEHQPSCLPPDAPVSDLEKANNLQNEAQCCHSADRHNAAEAWKQTEPAEQKLNQSVWIMPQOSAGLEESAPDTIPPKESGVAYVVDLHGASKRGCFMYGNSFSDESTQVENMLYPKLISLNSAHDFQGCNFSEKNMYARDRRDGQSKEGSGRVIAIYKASGIIHSYTYLCNCNTGRSVNSIIPACHDNGRASP PPPA FPSRYTVELFEQVGRAMAIAALDMAECNPWPRIVLSEHSSLTNL RAWMLKHVRNSRGLSSTLNVGVNKKRGLRTPPKSHNGLPVSCSENTLSRARSTGTSGAGGSSSSQQNSPQMKNSPSFPPHGSRPAGLPGLGSSTQKVTHRVLGPVRGKPVWEPLQHVFGLGHCWGK
5525	105	834	SNTLDFERHLFIMGQQISDQTQLVINKLPEKVKHVTLVRSEGSLSYYEFLGRVVAELNDVTAKVASQEKHLLFEVQPGSDSSAFWKVVVRVVCVKINKSSGIVBASRIMLYQFOLYKDITSQAAGVLAQSSTSEEPDENSSSVTSCQASLWMGRVKQLTDCEECCICMDGRADLILPCAHSFCQKCIDKWSDRHRCPICRQLQMTGANESWVVDAPTEDDMANYILNMADEAQOPHRP
5526	3	853	RRPCNPVRAAKRTGAAARAPRGLLEVTLRVAWRTLSSLIRTRAVTQVLVPGGSAKFPQNQWGLQPRSLLLQARGYVVRKPAQSLDDDPPTSTLLKDYQNVPGIEKVDVVVKRLLSLEMANKEMLKIKQEOPMKKIVANPEDTRSLEARITALSVKIRSYEBHLEKHKDKAHKRYLLMSIDQRKKMLKNLRNTNYDVFKEKICWGLGIEYTFPPLYYRRAHRRFVTKKALCIRVFQETQKLKRRRALAKAAAAAQKQAK

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			RRNPDSPAKAIPKTLKDSQ
5527	3225	565	LJRKYLHQNPLLRLHQPNRTCTFSATMKLDTKSRPKQSSCGKFQTKGIVVVGKWEVKIDPNMFADGQMDDLVCFEELTDYQLVS PAKNPSLFSKEAPKRKAQAVSSEEEEGKSSSPKKKIKLKKS KNVATEGTSTQKEFEVKDPELEAQGDDMVCDDPPEAGEMTSENLV QTAPKKKKNGKKGLEPSQSSTAAKVPKAKTWIPEVHDQKADVS AWKDLFVPRPVRLRALSFLGFSAPTPQALTLAPAIRDKLDILGA AETGSGKTLAFAPIPMIHAVLQWQQRNAAPPSNTTEAPPGETRTE AGAETRSPGKAEAESDALPDDTIVSEALPSDIAAEARAKGGT VSDQALLFGDDDAEGEPGSLLIREKPVPKQNEENEENLDKEQTGN LKQELDDKSATCKAYPKRPLLGLVLTPTRELAVQVKQHIDAVAR FTCIKTAILLVGMSTQKQQRMLNRRPEIVVATPGRLWELIKEKH YHLRNRLRQLRCLVVDEADRMVEKGHFAELSQLLEMLNDSQYNPK RQTLVFSATLTLVHQAPARILHKHHTKKMDKTAKLDDLMQKIGM RGKPKVIDLTRNEATVETLTETKIHCETDEKDFFLYYFLMQYPG RSLVFANSISCIKRLSGLLKVLDIMPLTLHACMHQKQRLRNLEQ FARLEDVCVLLATDVAARGLDIPKVQHVHYQVPRTEIYVHRSG RTARATNEGSLMLIGPEDVINFKKIYKTLKDEDIPLFPVQTK YMDVVKERIRLARQIEKSEYRNFOACLHNNSIEQAAAALIELE EDMYKGGKADQQEERRRQKQMKVLKKELRHLLSQPLFTESQTK YPTQSGKPFPLVSAPSKESESALSCLSKQKKKTQPKPKEQPQEQP QPSTSAN
5528	3	895	GPFLSACRMWGACKVKVHDSLATISITLRRYLRLGATMAKSKE YVRDFEADDTCLAHCWVWVRLDRNFHRFABKHNFAKPNDRAL QLMTKCAQTVMEELEDIVIAYGQSDEYSFVFKRKTNWPKRRASK FMTHVASQFASSYVFYWRDYFEDQPLLYPPGFGRVVVYPSNQT LKDYLWSWRQADCHINNLYNTFWALIQQSGLTPVQAQGRQGTL AADKNEILFQVNLQIYKTFKQVNLQIYKTFKQVNLQIYKTFK QPTEMEGKMAVTRTRTKPCPKPSHLPRAPCLRWL
5529	48	640	TFRLVSAHLKTRKLINPEAERRWRDWDSRGWLGVKMQRVSGL LSWTLSRVLWLSGLSEPAQRAQPRIMEEKALEVYDLIRTI RDPE KPNTLEELVVSESCVEVQEINEEEYLVIIIFTPTVPHCSLATL IGLCLRVKLQRCLPFKHKLEIYISEGHSTEDINKQINDKERV AAAMENPNLREIVEQCVLEPD
5530	4541	2606	AQIVHAISYCHKLHVGRDLKPEENVVFFEKQGLVKLTDGFSNK FQPGKKLITCSGSGLAYSAPEILLGDEYDAPAVDIWSLGVLFML VCGQPPFQEANDSETLTMIMDCKYTVPSHSKECKDLITPRMLQR DPKRASLEEENHPWLQGVDPSPATKYNIPLVSYKNLSEEEHN SIIQRMVLGDIADRDAIVEALETNRYNHITATYFLLAERILREK QEKEIQTRSASPNIKAQFRQSWPTKIDVEQDLEDDLTATPLSH ATVPQSPARAADSVLNHRSKGLCDSAKKDDLPALGPASTVP PASLKPPTASGRKCLFRVEEDEEDEDKKPMSSLSTQVVLRRKPS VTNRLTSRKSAWPVNQIIEEGESDDEFDMDENLPPKLSRLKMNIA ASPGTVHRYHRRKSGRGRSSCSSSETSDDDSESRRRLDKDSGF TYSWHRRDSSEGPPGSEGDGGSQSKPSNASGGVDKASPSENAG GGSPPSSGSGGNPTNTSGTTRCAGPSNSMQLASRSAGELVESLK LMSLCLGSQSLHGSTDKYIIDPQNGLSFSSVKVQEKSTWKMCISS GNAGQPVAVGGIKFPSDHMADTTTELERIKSKNLKNNVLQLPLC EKTISVNTQRNPKEGLLCASSPASCCHVI
5531	24	515	GSOPRAPRPRDSMERPEPELIQSQSWRAVSRSPLEHGTVLFARLF ALEPDILLPLFQYNCRQFSSPEDCLSSPEFLDHIRKVMLVIDAAV TNVEDLSSLEEVYLASLGRKHRAVGVKLSSFSTVGESLLYMLEKC LGPAFTPATRAAWSQLYGAVVQAMSRGWDGE
5532	3395	1402	SDWMVVGKRKMIIEDETEFCGEELLHSVLFQCKSVFDVLDGEEMR RARTRANPYEMIRGVFFLNRAAMKMANMDFFVDRMFTNPRDSYG KPLVKDREAEELLYFADVCAGPGGSEYVLWRKKWHAKGFGMTLK GPNDFKLEDFYSASSELPEPYYEGGGIDGDGITRPNISAFRN FVLDNTDRKGVHFLIMADGGSVEQGENLQEILSKQLLLQFLMA LSIVRTGGHFICKTFDLFTPFSVGLVYLLYCCFERVCLFKPITS RPANSERYVVCKGLKGVIDDVRDYLFAVNICKLNQLRNTDSDVNL

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			VVPLEVKIGDHEFTDYMIRSNEHSCLQIKALAKIHFVQDTTL SEPRQAEIRKECLRLWKGIPDQARVAPSSSDPKSKFFFELIQGTEI DIFSYKPTLLTSKTLKIRPVFDYRCMVGSGSEQKFLIGLGSQI YTWDGRQSDRWIKLDDLKTELPRDTLLSVEIVHELKGEGKAQRKI SAIHILDVLVLNGTDVREOHFNORIQLAEKFKAVSKPSRPDMN PIRKVEVYRLEEMEKIFVRLEMKIIKGSSGTPKLSYTGRDRHF VPMGLYIVRTVNEPWTMGFSKSFKKKFFYNKTKDSTFDLPADS IAPFHICXYGRLFWENGDGIRVHDSQKPQDQDKLSKEDVLSFIQ MHRA
5533	94	789	MKERRAPQPVVVARCKLVLVGDVQCGKTAMLQVLAKDCYPETYVP TVFENYNTACLETEEQRVELSLWDTSGSPYYDNVRPLCYSDSDAV LLCFDISRFETVDSLALKWRTEILDYCPSTRVLLIGCKTDLRTD LSTMELSHQKQAPISYEQGCAIAKQLGPEIYLEGSAFTSEKSI HSIFRTASMLCLNKPSPLPQKSPVRSLSKRLHLPSRSELISPT FKKEKAKXCSIM
5534	3	605	LVRGRARAANPGRVGAMGLRQRVENFLEQRNLVTEVLGAEAK TGVEKRYLAAGAVTLLSLYLLFGYGAISLICNLIGFVYPAYASIK AIESPSKSDDDTVWLTYWVYALFGLAEFFSDLLLSSWPFYVVGK CAFLLCFCMAPRPWNGALMLYQRRVVRPLFLRHGAVDRIMNDLSG RALDAAAGITRNVKPSQTQPKD
5535	1029	332	KSFMDSEARLCSLVELSDTQDETQKSDSENEIDLKIDCLQESQEL NLQKLKNSERILTEAKQKMRELTVNIKMKEDLIKELIKTKGNDAK SVSKQYTLKVTKLEDAEQAQKVELTETQKQLELENKDLSDVAM KVKLQKEFRKKVDAAKLRLVQVLQKKQODSKKLASLSTQNEKRAN ELEQSVDHMKYQKIQLQRKLQEENEKRQKLDAAVIKRDQQKIKVI LSYIPAKYNMKC
5536	942	282	AAATAASLSPRGCRILRTPSSDVSESRAPPSAAPLPT3RAQMSP SGRLCLLTIVGLLIPTRGQTLKDITSSSSADATIMDIQVPTRAP DAVYTEPSTSPTPTWPADETPQPFQTTQOLEGTDPGLVTDPET HKSTKAAHTDTTTTSERPSPTSDVQTDPQTLKPSGFHEDDPF FYDEHTLRKRGLLVAVLFITGIIILTSGKCRQLSRLCRNHC
5537	3	2391	RARVSSPQLRVFRSGRPRLRVLRINRTSVALRLAGTGRFVAKT PGHPGSWEMGLLTFRDVAEFSLEEWEHLEPAQKNLYQDVULEN YRNLLVSLGLVVSCKPDLLTFLERQKEPWNVKSEETVAIQPDVFSH YNKDLLTEHCTEASFQKVVISRRHGSCDLENHLRKRWKRECECG HNGCYDEKTFKYDQFDESSVESLHFHQQILSSCAKSYNFDQYRKV FTHSSLNNQSEEIDIWGHKHHIYDCKTSVLFRQVSTLNSYRNFIG EKNYHCNNSEKTLNQSSSPKHNQHENYFLEKQYKCFEEVFLQS MHGQEKEQSYKCNCVKCVEVCTQSLKHIQHOTIHIRENSYSNKY DKDLQSNSNLRKQIIHNEEKPYKCFKCGDSDLNHSLHLTQHQIIP TEEKPYKWKCECGVKVFLNCSLYLTQKQQIDTGENLYKCKACSKS FTRSSNLIVHQRINTGEKPYKCKECGKAFRCSSYLTKHKRHTG EKPYKCKECGKAFNRSSCLTQHQTHTGEKLYKCKVCSKSYARS SNLIMHQRVHTGEKPYKCKECGKVFSRSSCLTQHRIKHTGENLY KCKVCAKPFCTFSNLIVHERIHTGEKPYKCKECGKAFPYSSH RHHRIHTGEKPYKCKACSKSFSDDSSGLTVHRRTHTGEKPYTC CGKAFSYSSDVHQHRIHTGQRPYKCEECGKAFNYRSYLTHQR SHTGERPYKCEECKGKAFNSRSYLTTHRRRHTGERPYKCDCECGKA FSYRSYLTTHRRSHSGERPYKCEECKGKAFNSRSYLIAHQRSHTR EKL
5538	926	161	HSMMMKIPWGSIPLVMLLLLLGLIDISQAQLSCTGPPAIPGIPG IPGTPGPDGQPGPTPGIKGEKGLPGLAGDHGEFGEKGDPGIPGNP GKVGPKGPGMPKGPGAPGAPGPKGESEGDYKATQKIAFSATRTI NVPLRQDTIRFDHVITNMNNNNYEPRSCKFTCKVPGLYYFTYHA SSRGNLCVNLMRGRERAQKVVTFCDYAYNTFQVTTGGMVVLKLEQ GENVPLQATDKNSLLGMEGANSIFSGFLLPFDPMEA
5539	38	1258	HRGPSSGAAAPGCALPRGQALEGRSRRPQPMARRYDELPHYPG IVDGPAAALASFPETVPAVPGPYGPHRPPQPLPPGLDSDGLKREK DEIYGHPLFPLLALVFEKCELATCSPRDGAGAGLGTTPGGDVCS SDSFNEDIAAFAKQVRSERPLFSSNPEDLNLVIQAIQVLFHLL

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			ELEVHDLCDNFCHRYITCLKGKMPIDLVIEDRDGGCREDFEDY PASCPSLPDQNNMWIRDHEDSGSVHLGTPGSSGGLASQSGDNS SDQGDGLDTSVASPSGGEDEDEDLDQERRRNKKRGIFPKVATNIM RAWLFQHLSHPYPSEEQQKQLAQDTGLTILQVNNWFINARRIV QPMIDQSNRTGQGAASFPEGQPPIGGYTETQPHAVARPPGSVGMS LNLEGWHYL
5540	148	1440	PPLGAGAGVHARSPHPARRPLTTAGVGGRAPDLLPTPWRQHRG PSCAAAPGCALPRGQALEGPGRSRRPQPMARRYDELPHYPGIVD GPAALASFPETVPAVPGPYGPHRPPQLPPGLDSDGLKREKDEI YGHPLFPPLLALVFKECELATCSPRDGAGAGLGTTPGGDVCSSDS FNEDNTAFAKQVRSERPLFSSNPFLDNLMIQAIQVLRFHLLLE KGKMPIDLVIEDRDGGCREDFEDYPASCPSLPDQNNIWIRDHED SGSVHLGTPGPSSGGLASQSGDNSSDQGVGLDTSVASPSSGED EDLDQEPRRNKKRGIFPKVATNIMRAWLFQHLSHPYPSEEQQKQ LAQDTGLTILQVNNWFINARRIVQPMIDQSNRTGQGAASFPEG QPIGGYTETEPHVAFRAPASVGDEFGTRKEEWHYL
5541	148	1440	PPLGAGAGVHARSPHPARRPLTTAGVGGRAPDLLPTPWRQHRG PSGAAAPGCALPRGQALEGPGRSRRPQPMARRYDELPHYPGIVD GPAALASFPETVPAVPGPYGPHRPPQLPPGLDSDGLKREKDEI YGHPLFPPLLALVFKECELATCSPRDGAGAGLGTTPGGDVCSSDS FNEDNTAFAKQVRSERPLFSSNPFLDNLMIQAIQVLRFHLLLE KGKMPIDLVIEDRDGGCREDFEDYPASCPSLPDQNNIWIRDHED SGSVHLGTPGPSSGGLASQSGDNSSDQGVGLDTSVASPSSGED EDLDQEPRRNKKRGIFPKVATNIMRAWLFQHLSHPYPSEEQQKQ LAQDTGLTILQVNNWFINARRIVQPMIDQSNRTGQGAASFPEG QPIGGYTETEPHVAFRAPASVGDEFGTRKEEWHYL
5542	148	1440	PPLGAGAGVHARSPHPARRPLTTAGVGGRAPDLLPTPWRQHRG PSGAAAPGCALPRGQALEGPGRSRRPQPMARRYDELPHYPGIVD GPAALASFPETVPAVPGPYGPHRPPQLPPGLDSDGLKREKDEI YGHPLFPPLLALVFKECELATCSPRDGAGAGLGTTPGGDVCSSDS FNEDNTAFAKQVRSERPLFSSNPFLDNLMIQAIQVLRFHLLLE KGKMPIDLVIEDRDGGCREDFEDYPASCPSLPDQNNIWIRDHED SGSVHLGTPGPSSGGLASQSGDNSSDQGVGLDTSVASPSSGED EDLDQEPRRNKKRGIFPKVATNIMRAWLFQHLSHPYPSEEQQKQ LAQDTGLTILQVNNWFINARRIVQPMIDQSNRTGQGAASFPEG QPIGGYTETEPHVAFRAPASVGDEFGTRKEEWHYL
5543	2405	665	RWREOPWPRLTSEAVKTPALIRFPGPGRGVSPFPKPWDWKSPAP KRPFSDSGAFWSPEERRPGVLEAPRRRPVPASFRAVPPKPTRVHG SSASRDRVLARTMIVADSECR AELKDYLRFAPGGVGDSGPGE EQ RESRAR GRPGPSAFI PVEEV LREGAESL EQLHLG LEALMSSGRV DNLA VVMGLHPDYFTSFWR LHYLLHTDG PLASSWRHYIA MAA ARHQCSYLVGSHMAEFLQTGGDPEWLLGLKRAPEKLRLKLS EINK LLAHRPW LITKEHIQALLKTGEHTWLSAELI QALVLLTHCHSL S SFVFGCGILPEGDADGSPAPQOAPTPPSEQSSPPSRDPLNNSGGF ESARDVEALMERMQQLQESLLRDEGTSQEEMESRFELEKSESLL VTPSADILEPSPHDMLCFVEDPTFGYEDFTRGAQAPPTFRAQ DYTWE DHGYS LIQRLYPEGQQLLDEKFQAA YSLTYNTIAMHS GV DTSVLRRAIWNYIHC VFGI RYDDYD YGEVNQLLERNLKVYIKTV ACYPEKTT RRMYNLFWRHFRRISEKVIVNLLLEARMQ ALLY AL RATTRYMT
5544	1895	514	LGGLLGRQRLLL RMGAGR GLGAPM ERHGRASAT SVSSAGEQ AAGD PEGR RQEPLRRRASASVPAVGAS AEGTRR DR LGSY SGPT SV SR QRVESL RKKRPL F PWFG LDIGGT LVKLVYF EPK D ITAEEEEE EV ESLKSIRKYLTSNVAYGSTGIRDVHLEI KDLTLCGRKGNLHF FIR FPTHDMPAFIQMGRDKNFSSLH TVFCATGGGAYKFEQDFLTIGD LQLCKL D ELDCLIKGILYIDS VGFNGNRSQCYYFENPADSEKCQK LPFDLKNPYPLL VNIGGSV SI LAVY SKDN YKRV TGTSLGGGT F FGLCCLL TGCTT FEALEM ASRG D STKVD KLVRD IYGGD YER F G LPGWA VASSFGNMSK EKREAVSK EDIAR ATLITITNNIGSIAR MCALNENINQV VFVN FLRINTI AMRL LAYALD YWSKGQ LKAL F SEHEGYFGAVGALLELL KIP

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5545	802	131	GANWSAGRGAAWPVLLGLLALLVPCCGAAKTGAELVTGSVLKLLNTHHRVRLHSHDIKYGGSGQQSVTGVVEASDDANSYWRIRGGSEGGCPRGSPVRCGAVRLTHVLTGKNLHTHHFPSPLSNQEVSAFGEDGEGLDLDLWTVRCSGQHWEREAAVRFQHVGTSVFLSVTGEQYGSPIRGQHEVHGMPMSANTHNTWKAMEGIFTIKPSVEPSAGHDEL
5546	1592	146	FVPRGGHSSMGQSRSRHHQRARAQALQRNLLEAYAANPHSFVFTRGCTGRNIQLSLDVRVMPELTASRLQVRKKNSLKDCVAAGPLGVTHFLILSKTETNVYFKLMRLPGGPTLTQVKKYSLVRDVVS SLRRHRMHEQQFAHPPLLVLSFGPHGMHVKLMATMFQNLFPSINVHKVNLTIKRCLLIDYNPDQELDFRHYSIKVVPVGASRGMKKLLQEKFNPMSRLQDISELLATGAGLSESEAEPDGDHNITELPQAVAGRGNMRAQOSAVRLTEIGPRMTLQLIKVQEGVGECKVMFHSFVSKTEELQAILEAKEKKLRLKAQRQAQQAQNVQRKQEOREAHRKKSLEGMKKARVGGSDEEASGIPSRTASLELGEDDDEQEDDDIEYFCQAVGEAPSEDLFPEAKQKRLAKSPGRKRKRWEIMDRGRGRLCDQKFPKTKDKSQGAQARRGPRGASRDGGRRGRGPGRKVA
5547	1592	146	FVPRGGHSSMGQSRSRHHQRARAQALQRNLLEAYAANPHSFVFTRGCTGRNIQLSLDVRVMPELTASRLQVRKKNSLKDCVAAGPLGVTHFLILSKTETNVYFKLMRLPGGPTLTQVKKYSLVRDVVS SLRRHRMHEQQFAHPPLLVLSFGPHGMHVKLMATMFQNLFPSINVHKVNLTIKRCLLIDYNPDQELDFRHYSIKVVPVGASRGMKKLLQEKFNPMSRLQDISELLATGAGLSESEAEPDGDHNITELPQAVAGRGNMRAQOSAVRLTEIGPRMTLQLIKVQEGVGECKVMFHSFVSKTEELQAILEAKEKKLRLKAQRQAQQAQNVQRKQEOREAHRKKSLEGMKKARVGGSDEEASGIPSRTASLELGEDDDEQEDDDIEYFCQAVGEAPSEDLFPEAKQKRLAKSPGRKRKRWEIMDRGRGRLCDQKFPKTKDKSQGAQARRGPRGASRDGGRRGRGPGRKVA
5548	1	2153	DQTGGPETIAFTPSTMEPLCPLLLVGFSPLALARLGRNETTADSNETTTSGPPDPGASQPLLAWLLLPLLLLLLVLAAAYFFRERKQRKAVVTSOKKMPNGILEEEQEQQRVMLLSRSPSGPKKYFPIPVEHLEEIRIRSADDCKQFREFNSLSPSGH1QGTFELANEKEENREKNRYPN1LPNDHSRV1LSQLDG1PCSDY1NASY1DGYKEKNKFIAAQGPQKETVNDFWRMVWEQKSATIVMLTNLKERBEEKHQYWDQGCWTYGN1RCVEDCVVLUVDYT1RKFC1QPQLPDGCKKAPRLVSQIHLFTSWPDFGVFPTPIGMLKFLKKVKTLPVHAGPIVVCASAVGRTGTFIVIDAMMAMHAEQKVDFEFVSRIRNQRPMVQTDQMQTFIYQALLEYYYLYGDTEDVSSLEKHLQTMHGTTTFDKIGLEEEFRKLTVNRIMKENMRTGNLPANMKKARVIQIIPYDFNRVILSMKRGQEYTDYINASFIDGYRQKDYFIATQGPLAHTVEDWRMIWEWKSHTIVMLTEVQEREQDKCYQYWPTEGSVTHGEITIEIKNDTLSEAISIRDFLVTLNQQPQAREEQVVRVRFHGWPEIGIPAEGKGMDIDLIAVQKQQQQTGNH1PTVHCSAGAGRGTGFIALSNIERVKAEGLLDVFAQVKSRLQRPHMVQTLEQYEFCKVUQDFIDIFSODYANFK
5549	915	256	FEATGGKRLAKFMAGTARHDREMAIQAKKKLTATDPIERLRLQCLARGSAGIKGLGRVFRIMDDNNRTLDKFEFMKGLNDYAVVMEKEVEELFQRFDKDGNGTIDNFELLTLRPPMSRARKEVIMQAFRKLDKTGDGVITIEDLREVYNAKHHPKYQNGEWSEEQVFRKFLDNFDSPYDKDGLVTPPEEFMNYYAGVSAS1D7DVYFIIMMRRAWKL
5550	2364	1210	RKRKVFLKMRRLNRKKTLSLVKEELDAFPKPVESYVETSASGGTVSLIAFTTMALLTIMEFSVYQDTWMKYEVEVDKDFSSKLRINIDI TVAMKCQVVGADVLDIAETMVASADGLVYEPTEVFD1SPQQKEWQ RMLQLIQSRLQEEHSLQDV1FKSAFKSTSTALPPREDDSSQSPNACRIGHGLYVNKVAGNFHITVGKAIPHPRGHAAHLAALVNHESYNFSHRIIDHLSFGELVPA1INPLDGTKE1AI1NQMFQYF1VVPTKLHTYKISADTHQFSVTERERIINHAAGSHGVSGIFMKYDLSLMMVTVEEHMPFWQFFVRLCGIVGG1FSTTGMLHGIKFIVEIIICRFR1GSYKPVNSVPFEDGHTDNHPLLENNT
5551	211	1700	MQRDHTMDYKESCPVS1PSSDEHREKKRFTVYKVLVSVGRSE

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			WFLVGRYAEFDKLVNTLKKQFPAMALKTPAKRIFGDNFDPDFIK QRAGLNEFIQNVLVRYPELYNHPDVR AFLQMDSPKHQSDPS EDE DERSSQKLHSTSQNINLGPSPGNPHAKPTDFDFLKVGKGSGFKVH LLARKKLDGKFYAVKVLQKKV1VNLKRNKEQKHIMAERNVLLKNVKH PFLVGLHYSFQTTTEKLYFVLDVFVN GELFFHLQRERSFPEHRRAR FYAAEIASALGYLHSIKIVYRDLKPENILLDSVGHVVLTDGLC KEGTAISDTTTFCGTPEYLAPEVIRKQPYDNTVDWWCLGAVLY EMLYGLPPFYCRDVAEMYDNILHKPLSLRPGVSLTAWSILEELL EKDRQNRLGAKEDFLEIQNHPPFEESLSWADLVQKKIPPPFPNPNV AGPDDIRNFDTAFTEETV PVYSCVSSDYSITVNASVLEADDAPVG FSYAPPSEDLFL
5552	2748	930	LGPAAGAACMGKKHHKAEWRSYYEDYADKPLEKPLKLVLKVGG SEVTELSGSGHDSSYYDDRSDH ERERHKEKKKKKKKSEKEKHL DDEERRKRKEEKRRKREREREHCDTGEADDFFDGKKVEVEPPPDR PVRCARTQPAENESTPIQQLLEHFLRQLQRKDPHGF AFTPVDA IAPGYSMIIKHMPFGTMKDVKVANEYKSUTEFKADFLKLMCDNA MTYNRPDTVYYKLAKKILHAGFKMMMSKQAALLGNEDTAVEEPVP EVVVPQVETAKSKKPSREVISCMFEP EGNA CSLTDSTAEEHV L ALVHEAADEARDRINRFLPGGMG YLKRNGDGSLLYSVVNTAEP DADEEETHPVDLSSSLSSKLLPGFTTLGFKDERRNKVTFLSSATT ALSMQNNNSVFGDLIKSDEMELLYSAYGDETGVOCALSLQEVKDA GSYSKKVVDDLLDQITGGDHSRTLFQLKQRRNVPMKPPD EAKVG DTLGDSSSSVLEFMSMKSYPDVSDISMLSLLGKVKE LDPPDS HLNLD ETTKLLQDLHEAQ AERGGSRPSSNLSSLSN ASERDQHHL GSPSRLS VGEQPDVTHDPYEFIQLQSPPEAASAKT
5553	74	1095	LGEAVYLVS RMDGPVAEHAKQEPFHVVTPLESWALSQVAGMP VFLKCAENVQPSGSFKIRGIGHFCQC EMAKKGC RHLVCS SG NAGI AAAYAARLKGIPATIVLP ESTLSLQVQVQLQGE GAEVQLTGVWD EANLRAQE LAKRD GWENVPPFDPLI WKGHASL VQELKAVLRTP PGALVLA VGGGG LAGVVACLL EGVW OHVPI IAMETHGA CFNA AITAGKLVTLPDITSVAKSLGAKTVAARALECMQVCKIHSEVVE DTEAVSAVQQLL DDERMLV E PAGA ALAAIYSGLRRLQAE GCL PPSL TS VVVIVCGNN IN SRELA QALKTHL GOV
5554	166	2318	CSGR TGGR GS RLPAENV CLTCKL SGAETR GLCPAL RTWIM KV GR SF FWVLPF VLPWAVQ AVEHE EVA QRVIKL H RGRGV AAMQS RQ WVRD SCRKL SGLL RQKNA VL NLKTA IGA VEK DVGL SDEEK LFQ VHTFEI FQKELNESEN SVFQ AVYGLQ RALQ GDY KDV VN MKESSR QR LEAL REAI KEET EY MELL AAE KHQV EA LKNM QH QN QSL SML DEILED VRKA ADRL EEE HAF DDNK SVKG VNF EA VL RVEEEE AN SKQ NIT KREVED DGLS MLI PCGWL CTA IGL PTM FG YI IC GVLL GP SGLN SIKS IVQ VETL GE FG VFTI LF LV GLE F SPEK LR KV W KISL QGP C YM TL MIA F GLL W GH L RIK P TS QV FIST CLS S STPL VSR FLM GS ARG DK EGD 1DY STV LLGML V TQD V QL GL FMA VM PTL I QAG AS ASSSIV VEV RL V LIG QI LFS LAA V FLL CL VIK KYL I G PYY R K LH MES KG NKE I LIG ISAF I FPL MLTV TELL DV S MEL GCF FLAG AL VSS QGP VV TEE I AT SIE PIR DF LAIV FFAS I GLH VFPTF VAY EL TVL VFL T LSV VV VMK FLL A ALV L S L L PRSS QY I KIV I VSAGLA QV SE F SFV L G S RARRA GVIS REV YLL L S L L P A V L W RAAT TRC VPR PERRSS L
5555	212	1425	LSLRTRT EP APPR CE AAS QGRV GWRADA AAA EAVR SVWN RTR DR GTMA PQNL S TFC LLL YLIG VAI G RDF YK ILG VERS AS I KDI K KAYR KL AL QLH PDRN PDDP Q A Q E K F Q D L G A A Y E V L S D E K R K Q Y DTYG E E GL K DGH QSS HGD I FSH FF GDF GFM FGGT P R Q D R N I P R GSD II VD LEV T L E E V Y A G N F V E V V R N K P V A R Q A P G K R K C N C R O E MRTT QL G P G R F Q M T Q E V G C D E C P N V K L V N E E R T L E V E I E P G V R D GME Y PPI G E G E P H V D G E P G D L R F R I K V V K H P I F E R R G D D L Y T N V TIS L V E S L V G F E M D I T H L D G H K V H I S R D K I T R G A K L W K K G E G L P N F D N N N I K G S L I I T F D V D F P K E Q L T E E A R E G I K Q L L K Q G S V Q K V Y N G L Q G Y
5556	5835	3346	RTRGMSKNCVPMEFEEYLLRMFQGT FYLLQKITKDNN AHTVKS R

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			LEELDESYIEKFTDFLRLFVSVHLRRIESYSQFPVVEFLTLLFK YTFHQPTTHEGYFSCLDIWTFLDYLTSKIKSRLGDKEAVLNRYE DALVLLLTTEVLNRIQFNRQAAQLEELDDETLDDQQTEWORYLR QSLEVVAKMELLPTHAFSTLFPVLQDNLEVYLGQLQQFIVTSGS GHRLNITAENDCRRLHCSSLRDLSSLLQAVGRLAEYFIGDVFAAR FNDALTIVVERLVKVTLYGSQIKLYNIETAVPSVLKPDLIDVHAQ SLAALQAYSHWLAQYCSEVHRQNTQQFVTLISTTMDAITPLIST KVQDKLILSACHLLVSLAIFTVRPVFLISIPAVQKVFNRTDASA LRLVDKAQVILVCRALSNIILWLPWNPNEEQWPVRSINHASLI SALSDYRNKLKPSAVAPQRKMPMLDDTKLIIHQTLQSVLEDIVENI SGESTKSRSQICYQSLQESVCVSLALFPAFIHQSVDTDEMISFFL TLFRGLRVQMVGVFTEQIIQTFIINMFTREQIAESILHEGSTGCR VVEKFLKILQVVVQEPMQVFKPFLPSIIALCMEQVYPIIAERPS PDVKAELFELLFRTLHNNWRYFFKSTVLASVQRGIAEEQMENEQ QFSAIMQAFGOSFLQPDILHKQNLFYLETINTKQKLYKKKIFR TAMLQFVNVLQVLVHKSHDLQEEIGIAJYNMASVDFDGFFA AFLPEFLTS CDGVFDANQKSVLGRFKMDRVRERGRAKRRAEWA RKPGTCAARRGHIEASGRGLCPSCSLAAAHEMPADLVL
5557	1712	491	VILGAGLIRDKDMWIPVVGLPRLRLSALAGARFCILGSEAATR KHLPARNHCGLSDSSPQLWPEPFDPRNPFRKASKASLDFKRYVTD RRAETLAQIYLGKPSRPPLLCECNPGPGILTQALLLEAGAKVV ALESDDKTFIPHESLKGKNLDCGKLRVIHCDFFKLDPRSGGVIKPP AMSSRGLFKNLGIIEAVPWTADIPLKUVGMFPSRGEKRALWKLAY DLYSCTSIVKFGRIEVNMFIGEKEFQKLMADPGNPDLYHVLSVI WOLACEIKVLIHMEPWSSFDIYTRKGPLENPKRRELLDQIQLQKLY LIQMI PRQNLFKTNLTPMNYNIFHLLKHCFGRRSATVIDHLS LTPLDARDILMQIGKQDEKVVNMHPQDFKTLFETIERSKDCAY KWLYDETLEDR
5558	1509	96	RAGCTHPQVPADLGAPAEPRRPKTCVCLLQPQPGGQRGPTTMIT QGVFSMRLTPVGVLTSLAYCLHQRRVALAELQEAQDGQCPVDRS LLKLKMKVQVVFRRHARGSPLKPLPLEQVEWNPQOLLEVPQTOFD YTVTNLACGPKPYSPTYDSQYHETTLKGCMFAQGLTKVGMQOMFA LGERLRKNYVEDIPFLSPTFNPQEVFIRSTNIFRNLESTRCLLA GLFQCQKEGPIIIHTDEADSEVLYPNYQSCWSLRQRTRGRQTA SLQPGISEDLKKVKDRMGIDSSDKVDFILLDNVAAEQAHNLPS CPMLKRFARMIEQRAVDTSLYILPKEDRESLQMAVGPFHLILES NLLKAMDSATAPDKIRKLYIAHDVTFTPLMTLGIFDHKWPP FAVDLMELYQHLESKEWFVQLYYHGKEQVPRGCPDGLCPDMF LNAMSVYTLSPEKYHALCSQTQVMEVGNEE
5559	150	1983	PLAATAHFAKMSRVAKYRRQVSSEDPPDIDSLLTSLPEEMELEK ELDVVDPDGSVPVGLRQRNQTEKFQSTGVNREAMLNFC3KETKK LMQREMMSMDESKVQETKTDAKNGEERGRDASKKALGPRRDSLGE KEPKRGGLKKSFSRDRDEAGGKSGEKPKKEEIKIRGIDKGRVRAA VDKKEAGKDGRGERAVATKKEEEKKGSDRNTGLSRDKDKKREE MKEVAKKEDDEKVKGERRNTDTRKEGEKMKRAGGNNTDMKKEDEK VKRGTGNTDTKKDDEKVKKNEPLHEKEAKDDSKTKTPKQTPSG PTKPSEGPAKVEEEAAPSIFDEPLERVKNNDEPMTEVNVNNSDC ITNEILVRFTEALEFNTVVKLFALANTRADDHVAFAIAIMKAN KTITSLNLDNSNHITGKGILAIFRALLQNNLTIELRFHNCRHICG GKTEMEIAKLLKENTTLLKLGYHFELAGRMTVTNLLSRNMDKQ RQKRLQEQRQAQEAKGEKKDLLEVPKGAVAKGSPKDPSPQSPK PSPKNSPKGGAPAAPPPPPPPLAPPLIMENLKNNSLSPATQRKM GDKVLPAQEKFNSRDQLLAIRSSNLQQLKVEVPKLLQ
5560	9	921	SSVVEFSALSVSMACLSPSQLQKFQOQDFLVLEGFLSAEECVAM QQRIGEIVAEMDVPVLCRTEFSTQEEEQLRAQGSTDYFLSSGDK IRFFFEKGVDFEKGFLVPPPEKSINKIGHALHAHDPPVFKSITHS FKVQTLARSILQLQMPVVVQSMYIFKQPHFGGEVSPHQDASFLYT EPLGRVLGVWIAVEDATLENGCLWFIPGSHTSGVSRMRMVRAPVG SAPGTSFLGSEPARNSLFVPTPVQR GALVLIHGEVVKHSQNL SDRSRQAYTFHLMEEASGTTWSHENWLQPTAELPFPOLYT
5561	2175	1775	CYFIFQFSSSPYPLHPHQTPAPLPNPGLYPPPVSMSPGQPPPQ

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			QLLAPTYFSAPGVMFGNPSYPYAPGALFPFFFFHLYPNTQAPSQVYGGVTYYNPAQQQVQPKPSPPRRTQPVTCKPPPPEVVSRGSS
5562	342	1385	SSGKNDMAAGAAGLVRGLKAGVLSQADYLNLVQCETLEDKLHLQSTDYGNFLANEASPLTVSVIDDRLKEKMVVEFRHMRNHAYEP LASFLDFITYSYMIDNVILLITGTLHQRSIAELVPKCHPLGSFE QMEAVNIAQTPAELYNAILVDTPLAAFFQDCISEQDLDENMIEI IRNTLYKAYLESFYKFCCTLGGTTADAMCPILEFEADRRAFIIT INSFGTELSKEDRAKLFPHCGRLYPEGLAQLARADDYEQVKNVA DYYPEYKLLFEGAGSNPGDKTLEDRFFHEEVKLNKLAFLNQFHFGVFYAFVVLKEQECCRNIWIAECIAQRHRAKIDNYIPIF
5563	342	1385	SSGKNDMAAGAAGLVRGLKAGVLSQADYLNLVQCETLEDKLHLQSTDYGNFLANEASPLTVSVIDDRLKEKMVVEFRHMRNHAYEP LASFLDFITYSYMIDNVILLITGTLHQRSIAELVPKCHPLGSFE QMEAVNIAQTPAELYNAILVDTPLAAFFQDCISEQDLDENMIEI IRNTLYKAYLESFYKFCCTLGGTTADAMCPILEFEADRRAFIIT INSFGTELSKEDRAKLFPHCGRLYPEGLAQLARADDYEQVKNVA DYYPEYKLLFEGAGSNPGDKTLEDRFFHEEVKLNKLAFLNQFHFGVFYAFVVLKEQECCRNIWIAECIAQRHRAKIDNYIPIF
5564	3	914	RVRRDKRAVWTARGRRRCGDSMSGGWMAQVGAWRTGALGLALL LLGLGLGLEAAASPLSTPQAQAGPSSGSCPPTKFCQCRTSGLC VPLTWRCRDLDCSDGSDEEECRIEPCQTQKGQCPGPPGLCPCT GVSDCSGGTDKKLNRCSRLACLAGELRCTLSDDCIPLTWRCGHPDCPDSSDELGCCTNEILLPEGDATTMGPPTVLESVTSLRNATTM GPPVTLESVPSVGNATSSAGDOSGSPTAYGVIAAAAVLSSLVATLTLSSWLRAQERLRLPLGLLVAMKESLLLSEQKTSLP
5565	993	138	RWNSPNPARAGSISRPQRAPGSVSAMTAAVFFGCAFIAGPA LALYVFTIATEPLRIIFLIIAGAFFWLVSLLISSLVWFMARVIID NKGDPQTQKYLIFGAFVSYIQEMFRFAYYKLLKKASEGLKSIN PGETAPSMLLAYVSGLGFGIMSGVFSVNTLSDSLGPCTVGIH GDSPQFFLYSAFMTLVILLHVFWGIVFFDGCEKKKGILLIVL LTHLLVSAQTFISSIONYLASAFIILVLMGTWAAGGSCRS LKLCLLCQDKNFLLYNQSR
5566	2043	1232	SHIQHIGRGAQAPVKMWSMISRAVVLVFGMLYPAYYSYKAVKT KNVKEYVRWMMYWIVFALYTIVTVIETVADQTVANFPLYELKIAFV IWLLSPYTKGASLIYRKFLHPLSSKEREIDDYIVQAKERGYET MVNFGRQGLNIAATAAVTAALKSQAITERLRSFSMHDLTIIQG DEPVGQRPYQPLPEAKKKSKPAPSEASAGYGIPLKDGEKTDEEA EGPYPSDNEMLTHKGPRRSQSMKSVKTTKGRKEVRYGSLKYKVKK RPQVF
5567	1554	233	EFLCGSVPSDLANEDGLTALHQCCIDDFREMVQOLLEAGANINA CDSECWTPLHAAATCGHLHLVELLIASGANLLAVNTDGNMPYDL CDDEQFLDCLETAMADRGITQDSIEAARAVPELRLDDIRSRQLQ AGADLHAPLDHGATLLHVAAANGFSEAAALLLEHRASLSAKDQD GWEPLHAAAYWGQVPLVELLVAHGDALNAKSLMDETPLDVCGDE EVRAKLLLELKHKHDALLRAQSQRQSLRRRTSSAGSRGKVVRV SLTQRTDLYRKQHAQEATIVWQOPPPTSPEPPEDNDDRQTAELR PPPPEEDNPVVRPHNGRVGGSPVRHLYSKRLDRSVSYQLSPLD STTPHTLVHDKAHHTLADLKRQRAAKLQRPPGEGPESPETABP GLPGDTVTQPQDCFFRAGGDPPILLKLTAPAVEAPVERRPCCLLM
5568	1731	587	AEDRQPASRRGAGTTAAMAASGPGCRSWCLCPEVPSATFFTALL SLLVSGPRLFLLQQPLAPSGLTLKSEALRNWQVYRLVTYIFVYE NPISILCGAIITIWFAGNFERTVGTVRHCFFTVIFAIFSAIIFL SFEAVSSLSKLGEVEDARGFTPVAFAMLGVITVRSRMRRALVFG MVVPSVLPWLLLGASWLIQQTSTSFLSNVCGLSIGLAYGLTYCYS IDLSERVALKLDQTPFSLMRRISLVFKYVSGSSAERRAAQSRKL NPVPGSYPTQSCHPHLSPSPHPVQTOQHASGQKLASWPSCPTEGHM PTLPPYQPASGLCYVQNHFGPNPTSSSVYPASAGTSLGIQPPTP VNSPGTVYSGALGTPGAAGSKESSRVPMP
5569	2	835	QTPCPLAWERGSRSEDISVPGQKPPTCSSFSGMDVGPSSLPHLG

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			LKLLLLLPLRGQANTGCGYJIPGMPGLPGAPGKDGYDGLPGPKGEPIPAIPGIRGPKGQKGEPGLPGHPGKNPGPMGPPGMPGVPGPMGIPGEGEGRYKQKFQSFTVTQTHQPPAPNSLIRFNAVLTNFQGDYDTSTGKFTCKVPGLYYFYVYHASHTANLCVLLYRSGVKVVTFCGHTSKTNQVNSGGVLLRLQVGEEVWAVNDYYDMVGIQGSDSVFSGFLLEFPD
5570	264	946	RDRDRGGVATSTEEPAPRPRAPQSRRGPVPSQTGRGRERGGGDTMSSSPGKRRMDTDVVKLIESKHEVTILGGLNEFVVKFYGPQGT PYEGGVVKVRVLDLPDKYPFKSPSIGFMNKIFHFPNIDEASGTVCL DVINQTWTALYDLTNIFESFLPQLLAYPNPIDPLNGDAAAMYLHRPEEYKQKIKKEYIQKYATEEALKEQEEGTGDSSESSMSDFSED EAQDMEL
5571	264	946	RDRDRGGVATSTEEPAPRPRAPQSRRGPVPSQTGRGRERGGGDTMSSSPGKRRMDTDVVKLIESKHEVTILGGLNEFVVKFYGPQGT PYEGGVVKVRVLDLPDKYPFKSPSIGFMNKIFHFPNIDEASGTVCL DVINQTWTALYDLTNIFESFLPQLLAYPNPIDPLNGDAAAMYLHRPEEYKQKIKKEYIQKYATEEALKEQEEGTGDSSESSMSDFSED EAQDMEL
5572	2802	2085	RTDYRTGIPGRRFRVMAAGDGDVKLGLTGSSESSNDGSES PGDAGAAAEGGWAAAALALLTGGEMILLNVALVALVLLGAYRLWRWGRGRGLGAGAGAGEESPATSLPRMKRDFSLQLRQYDGSRNP RILLAVNGKVFVDVTGSKFYGPAGPYGTFAGRDAASRGLATFC LDKDALARDEYDDLSDLNAVQMSREVEMQFKEKYDYGRLKPGE EPSEYTDDEEDTKDHNNKQD
5573	2562	219	VPARTPNAFDQGPPEARATAATPCQSGGRERAAGEAAEDGVKMAAF SEMGVMPEIAQAVEEMDWLLPTDIQAESIPLILGGDVLMAAET GSGKTGAFSIPVIQIVYETLKDDQQEGKKGKTTIKTGAWSLNWKQ MNPYDRGSAFAIGSDGLCQCOSREVKEWHGCRATKGLMKGHYYE VSCHDQGLCRVGWSTMQASLDLGDKFGFGGGTGGKSHNKQFD NYGEFTMHDTIGCYLDIKGHVKFSKNGKDLGLAFLIPPHIMKN QALFPACVLKNAELKFNFGEEEFKFPKDGFBVALSKAPDGYIVK SQHSGNAQVTQTKFLPNAPKALIVEPSRELAEQTLNNIKQFKKY IDNPKLRELLIIGGVAARDQLSVLENGDIVVGTPGRLLDVST GKLNLQSVRFVLDEADGLLSQGYSDFINRMHNQ/PQVTS DGKR LQVIVCSATLHSFDVKKLSEKIMHFPTWDLKGEDSVPDTVHHV VVPVNPKTDRLWERLGKSHIRTDVHAKDNTRPGANSPEMSEA IKILKGBYAVRAIKEHMDQAIIFCRTKIDCDNLQYFIQQGGG PDKKHQFSCVCLHGDRKPHERKQNLERFKKGVDVFLICTDVAAR GIDIHGPVYVINVTLPDKQNYVHRIGRVGRAERMGLAISLVA TEKEKVWVHVCSSRGKGCYNTRLKEDGGCTIWYNEMQLLSEIEE HLNCNTISQVEPDIKVPVDEFDGKVTVYQKRAAGGGSYKGHDIL APTVQELAALEKEAQATFLHLGQPLNQLFRTF
5574	1731	952	NEGLEVFKQELQPEDKGAVPEDASTERSAMASLGLQLVGYILGLLGLT LVA MLLPSWKTSSYVGASIVTAVGFSKGLWMECATHS TGITQCDIYSTLLGLPADIQAQAMMVTTSSAIISSLACIISVVGMRCTVFCQESRAKDRVAVAGGVFTIILGGLLGFIPVVAWNLHGILRD FYSPVLPDSMKFEGEALYLGIISSLFSLIAGIILCFSCSCQRNRSNYYDAYQAQPLATRSSPRPGPPKVKSEFNSYSLTGYV
5575	456	766	LLWALPCPPPTAAAVLLSSTGLMELLEKMLALTIAKADSPTAL LCSAWLLTASFSAOQHKGSLSQKDPLLSQACVGCLEALLDYLDAR SPDIGRNSPHYLMP
5576	249	2146	RSWGAPFWRMRLLRRRHMPRLAMVGCAFVLFLFLHREVSSRE EATEKPBWLKSLVSRKDHVLDLMLEAMNNLRDSMPKLQIRAPEAQQTLSFSTNQSCLPGFYTPAELKPFWERPPQDPNAPGADGKAFQSKWTPLETQEKEEGYKKHCFNAFASDRISLQRSLGPDTRPPECVDQKFRRCPLATTSTVIVFHNEAWSTLLRTVYSVLHTTPAIIKK EIIILVDDASTEEHILKEKLEBOYVKQLQVVRVVRQERKGHLITARL LGASVAQAEVLTFDAHCCEFCHGWLPEPLLARIAEDKTVVSPDI VTIDINTFEFAKPVQRGRVHSRGNFDSWLTFGWETLPPHEKQRRKDETYPIKSPTFAGGLFSISKSYFEHIGTYDNQMBIWGGENVEM

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			SFRWQCGGQLEIIPCSVVGHVFRTKSPHTFPKGTSVIARNQVR LAEVWMDSYKKIIFYRRNLQAAKMAQEKSFGDISERLQLREQLHC HNFSWYLNVYPMEMLPDLTPTFYGAIKNLTQCLDVGENNRG GKPLIMYSCHGLCGNQYFETYFTQRDLRHNIAKQLCLHVSKGALG LGSCSFTGKNSQVPKDEEWEELAQDQLIRNSGSGTCLTSQDKKPA MAPCNPSDPHQWLWLF
5577	3	1275	RNSDCSCGEISVHCLPWVLFILDLKVESSMFCPLKLTLIPVLLD YSLGLNDLNVSPELTIVHGDSALMGCVFQSSTDCKCIFKIDWT SPGHEAKDEYVLYYYSNLSVPQIRFQNVRVHLMDGILCNDGSLLL QDVQEADQGTYICEIRLKGESQFKKAVVHLVPEEPKELMVHV GGLIQMGCVFQSTEVKHVTKVWEWIFSGRRRAKEIVFRYYHKLRM SVEYSQSWSGHFQNVRNVLDG1FERNDSIMLOGVRESDGNNYTCS IHLGNLVFKKTITVLHVSPEEPRTLVTPAALRPLVLGGNQLVIIIV GIVCATILLPVIIIILIVKKTCGNKSSVNSTVLVKNTKKTNPEIK EKPCHFCEGEKHIYSPPIREVIEEEEPSEKSEATYMTMHPV WPSLRSDRNNSELKKSGGMPKTQAF
5578	3	783	AVESMASPGAGRAPPELPERNQGYREVEYWDQRYQGAADSAFYD WFGDFSSFRALLEPELRPEDRILVLGCGNSALSYELFLGGFPNV TSVDYSSVVVAAMQARYA-HVPOLRWETMDVRKLDFPSASEFDVVL EKGTLDALLAGERDPWTVSSEGTVHDQVLSSEVSRLVLPGGRFI SMTSAAPPHFRTRHYAQAYYCWSLHRATYGSGFHFHLYLMHKGGK LSVQAQLALGAQIILSPPPPTSPCFQLQDSDHEDFLSAIQL
5579	3	1540	RNSGLARGASALARHGGGLACCGWGDCGACASRCQGVMEGLLTR CRALPALATCSRQLSGYVPCRPHCAPRGRRLLLSRVFOPOQNL REDRVLSQLQDKSDDLTCKSQRQLMLOQVGLIYFASPQCYHLLPYTV RAMEKLVRLVRVIDQEMQAIGGQKVNMPSLSPAELWQATNRWDLMGK ELLRLRDRHGKEYCLGPTEERAITALIASQKKLSYKQLFFLYQ VTRKFRDEPPRPFGLLGRREFYMKDMYTFDSSPEAAQQTYSLVC DAYCSLFNKLGLPFLVKVQADVGTTIGGTVSHFQLPVDIGEDRLA ICPRCSFSANMETLDSLQMNCPACQGPLTKTGIEVGHTFYLGT KYSSIFNAQFTNVCGKPTLAEMGCGYGLGVTRILAAAIEVLSTED CVRWPSLLAPYQACLIIPPKKGSQEAASELIGQLYDHITEAVPQ LHGEVLLDDRTHTLIGNRKLANKFQGYPFVIAGKRALEDPAHF EVWCQNTGEVAFLKDGVMDLLTPVQTV
5580	1681	450	ADAGTRCIPGFVPSGAGYSAFAQRGRRSSGRMAAAAPGLTAP WRLLQCCELEAGEGLGMAVPAAAMGSPSALGQSGPGSMAPWCVSS GPSRYVLGMQELFRGHSKTREFLAHSAKVHSVAWSCLGRRLLASG SFDTKATSVFLLKEKDRLVKENNYRGHGDSVDQLCWHPSPNPDLFVT ASGDKTIRIWDVRTTKC1ATVNTKGENINICWSPDGQTIAVGNK DDVVTFIDAKTHRSKAEEQFKFVEVNEISWNNDNNMFLLTNNGNC INILSYPELKPVQSIINAHPSNCICIKFDPGMKYFATGSADALVS LWDVDELVCVRCFSRLDPVRTLFSHDKMLASASEDHFIDIA EVETGDKLWEVQCESPFTVVAWHPKRPLLAFACDDKDGKYDSSR EAGTVKLFLGPNDs
5581	54	947	GGGSGPRAFSATLDTGEGSVAAVASGEDKGIAASAAAAAVFACS CSPDPQSSSTMNPVYSPVQPGAPYGNPKNMAYTGYPTAYPAAAPA YNPSLYPTNSTPSYAPEFQFLHSAYATLMMKQAWPQNSSSCGTEG TFHLPVDIGTENRTYQASSAAFRYTAGTPYKVPPQSNTAPPY SPSPNPYQTAMYPIRSAYPQONLYAOGAYYTOPVYAAQPHVIHH TTVVPQNSIPSIAIYPAPVAAPRTINGVAMGMVAGTTMAMSAGTLL TTPQHTAIGAHPVSMPTYRAQGTPAYSYVPPH
5582	5775	2739	IITNNNNVIIPLVIAYHLSGSQAQARGERSPAERLIMERQKRKADI EKGLQFIQSTLPLKQEEYEAFLLKLVONLFAEGNDLFRKDYKQ ALVQYMEGLNVADYAAASDQVALPRELLCKLHVNRRAACYFTMGLY EKALEDSEKALGLDSIESIRALFRKARALNELGRHBAYECSSRC SLALPHDESVTQLQGEQELAQKGLLVRKAYKRQPELETFSLLSNG TAAGVADQGTSNGLGSIDDIETDYVDPRGSPALLPSTPTMPLF PHVLDLLAPLDSSRTLPSSTDSSLDFSDGDVFVGPEDLTLLDSL VQGGLSGSGVPSLQLIPVFPGGTPLLPPVVGGSIPVSSPLPP ASFGLVMDDPSKKLAAASVLDALDPPGPTLDPLDLPYSETRLDAL

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			DSFGSTRGSLDKPDSMEETNSQDHRPPSGAQKAPSPERPCMPNTALLIKNPLAATHEFKQACQLCYPKTGPRAVDITYREGLEHKCKRDILLGRRLRSSEDTWKRIRPRPTKTSFVGSSYLLCKDMINKQDCKYGDNCTFAYHQEEIDVWTEERKGTLNRDILFDPLGGVKRGSLTIAKLLEKEHQGIFTFLCEICFDSKPRIISKGTKDSPSVCSNLAAKHSFYNNKCLVHVIRSTSLKYSKIROFQEHFQFDVCRHEVRYGLREDSCHFAHSFIELKVWLQQYSGMTHEDIVQESKKYWQOMEAHAGKASSSMGAPRTHGPSTFDLQMKFVCGQCWRNGQVVEPDKDLKYCSAKARHCWTKERRVLLVMSKAARKWVSVRPLPSIRNFPQYDLCIHAQNGRKCQYVGNCNSFAHSPEERDMWTFMKENKILDMQTYDMWLKKHNPKGPKGEGTPISSREGEKQIQMPTDYADIMMGYHICLWCGKNSNSKKWQOQHIQSEKHEKVFTSDSLASGWAFRFPMEFRLCDRLQKGKACPDDGDKCRAHQQEELNEWLDRREVLKQKLAKARKDMLLCPRDDDFGKYNFLLQEDGLAGATPEAPAAAATATTGE
5583	3	1265	SSGCRQGRPGRSDRPRPPPDRHKMVKETRYDILGVKPSASPEEIKKAYRKILALKYHPDKNPDEGEKFKLISQAYEVLSDPKKRDVYDQGGEQAIAKEGGSGSPSFSSPMIDIFDMFFGGGRMARERRGKNVHQLSVTLEDLYNGVTKKLALQKVNICEKCEGVGGKKGSVEKCPLCKGRGMHIHQOIQIGPGMVQQIQTVCIECKGQGERINPKDRCESCSGAKVIREKKIIIEVHVEKGMDQKILFHGEQDQEPELEPGDVIIVLDQKDHSVFQRGRGHDLMKMKIQLSEALCGFKKTIKTLNRILVITSKAGEVIKHGDLRCVRDEGMPYKAPLEKGILIIQFLVIFPEKHWLSLEKLPQLEALLPPRQKVRITDDMDQVELKEFCPNEQNWROHREAYEBEDEDGPQAGVQCQTA
5584	3	1265	SSGCRQGRGRSDRPRPPPDRHKMVKETRYDILGVKPSASPEEIKKAYRKILALKYHPDKNPDEGEKFKLISQAYEVLSDPKKRDVYDQGGEQAIAKEGGSGSPSFSSPMIDIFDMFFGGGRMARERRGKNVHQLSVTLEDLYNGVTKKLALQKVNICEKCEGVGGKKGSVEKCPLCKGRGMHIHQOIQIGPGMVQQIQTVCIECKGQGERINPKDRCESCSGAKVIREKKIIIEVHVEKGMDQKILFHGEQDQEPELEPGDVIIVLDQKDHSVFQRGRGHDLMKMKIQLSEALCGFKKTIKTLNRILVITSKAGEVIKHGDLRCVRDEGMPYKAPLEKGILIIQFLVIFPEKHWLSLEKLPQLEALLPPRQKVRITDDMDQVELKEFCPNEQNWROHREAYEBEDEDGPQAGVQCQTA
5585	2619	915	LPAGTPESSLHEALDQCMTALDLFLTNQFSEALSYLKPRTKESMYSHTYATILEMQAMMTFDPQDILLAGNMKEAQMLCQRHRRKS SVTDSFSSLVNRPTLGQFTEEEIHAEVCYAKCLLQRAALTFLQDENMVSFIKGGIKVRSNYSQTYKELDSLVSQSSQYCKGENHPHFEVG VKLGVGFANLTLSMLPTRILRLLFVGFSGNKDYGLLQLEEGASGHSFRSVLCVMLLCYHTFLTVLGTGNVNIIEEAEKLLKPYLNRYPKGAIIFLFLAGRIEVIKGNDAAIRRFEECCEAQQHWKQFHMCYWELMWCFTYKGQWKMSYFYADLLSKENCWSKATYIYMKAAYL SMFGKEDHHPKPGDDEVFLFRAVPGLKLKIAGKSLPTEKFAIRSKRRYFSSNPISLPVPALEMMyIWNGYAVIGKQPKLTDGILEIITKAEEMLEKGPNENEYSDVDECLVKLLKGLCLKYLGRVQEAEENFRSISANEKKIKYDHYLIPNALLEALLMEOQDRNEEAIKLLESAKQNYKNYSMESRTHFRIQATLQAKSLENSSSRSMVSSVSL
5586	2619	915	LPAGTPESSLHEALDQCMTALDLFLTNQFSEALSYLKPRTKESMYSHTYATILEMQAMMTFDPQDILLAGNMKEAQMLCQRHRRKS SVTDSFSSLVNRPTLGQFTEEEIHAEVCYAKCLLQRAALTFLQDENMVSFIKGGIKVRSNYSQTYKELDSLVSQSSQYCKGENHPHFEVG VKLGVGFANLTLSMLPTRILRLLFVGFSGNKDYGLLQLEEGASGHSFRSVLCVMLLCYHTFLTVLGTGNVNIIEEAEKLLKPYLNRYPKGAIIFLFLAGRIEVIKGNDAAIRRFEECCEAQQHWKQFHMCYWELMWCFTYKGQWKMSYFYADLLSKENCWSKATYIYMKAAYL SMFGKEDHHPKPGDDEVFLFRAVPGLKLKIAGKSLPTEKFAIRSKRRYFSSNPISLPVPALEMMyIWNGYAVIGKQPKLTDGILEIITKAEEMLEKGPNENEYSDVDECLVKLLKGLCLKYLGRVQEAEENFRSISANEKKIKYDHYLIPNALLEALLMEOQDRNEEAIKLLESAKQNYKNYSMESRTHFRIQATLQAKSLENSSSRSMVSSVSL
5587	1768	148	SSAVIDGAVGRPVAVAVGGPPHSCRCRPCCMAATGVHLGCTSA

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			CVAVYKDGRAGVVANDAGDRVTPAVVAYSENEEIVGLAAKQSRT RNISNTVMVKQILGRSSSDPQAQKYTAESKCLVIEKNGLRYE IDTGEETKFVNPEVARLIFSKMKTAEHSVLGSDANDVVITVPF DFGEKQKNALGEAARAAGFNVLRLIHEPSAALLAYGIGQDSPTG KSNILVFKLGGTSLSLVMEVNSGIIYRVLSTNTDDNIGGAHFT TLAQYLASEFQRSFKHDVRGNARAMMKLTNSAEVAKHSLSTLGS ANCFILDLSLYEGQDFDCNCVSRARFELLCSPLFNKCIEAIRGLLDQ NGFTADDINKVVLCCGGSSRIPKLQQQLKDLFPNAVLLNSIPPDE VIPIGAIAIEAGILIGKENNLVDESLSMIECSARDILVKGVDGESGA SRFTVLFPSGTPLPARQRHTLQAPGSISSVCLELYESDGKNSAK EETKFAQVVLQDLDKKENGLRDILAVLTMKRD GSLHVTC TDQET GKCEAISIEIAS
5588	3	589	TPPPPEQAMVAATVAAWLLLWAAACAQQEQDFYDFKAVNIRGK LVSLEYRGSVSLLVVNVASECGFTDQHYRALQQLQRDLGPHHFN VIAFPNCMQFGQQEPDSNKEIESFARRYTSVSFPMFSKIAVTGTG AHPAKYLAQTSGKEPTWNFWKYLVADDGKVVGAWDPTVSVEEV RPQITALVRKLILLKRDEL
5589	1884	553	LRQAWHEGGIGQTDKERGAAALPGEEGDPTRGRSLGRASWESGS PRRSPSPFSSFLPPIPCLSLEARPCSIDERRNWSSLIGRPGAPAS GLNRSSGLWLGPDRCRPRSRCSRCVMENPSPAALGKALCALL ATLGAAGCPLGGESICSRAPAKYSITFTGKWSQTAPPKQYPLF RPPAQWSSLLGAHSSDYSMWRKNOVNSNGLRDAERGEAWALM KEIEAAGEALQSVHAVFSAPAVPSGTGQTSAELEVQRRHSLVSF VVRIVPSPDWFVGVDSLDCGDRWREQAALDLYPYDAGTDSCF TFSSPNFATIPQDTVTEITSSSPSHPANSFYYPRLKALPPIARV TLLRLRQSPRAFIAPPAPVLPUSRNEIVDSASVPETPLDCEVSLW SSWGLCGGHCGRLGTSRTRYVRVQPAANGSPCPEEEEACVP DNCV
5590	72	896	LCSSGALRLLPAMWAWSAFLVCLAFSLATLVQRGSGDFDDFN EDAVKETTSVKQPWDHTTTTNTNRPCTTRAPAKPPGSGLDLADA LDDQDDGRRKPGTIGGERWNHVTTTTCKRPVTRAPANTLGNDFD LADALDDRNRDDGRRKPIAGGGGFSKDLEDIVGGGEYKPDKG KGDRGYGSNDDPGSGMVAEPGTIAGVASALAMALIGAVSSYISY QOKKCFCSIQQGLNADYVKGENLEAVUCEEPQVKYSTLHTQSSE PPPPPPEPARI
5591	68	1494	AGSSRRAAAERLLVSAGCRSLAGRASGVLLPAELLPGEEEAMA LRVTRNSKINAENKAKINMAGAKRVPATAATSKPGLPRRTALG DIGNKVSQLOQAKMPMKKEAKPSATGVVIDKLPKPLEKVPMLV PVPVSEPVPEPEPEPEPEPVKEEKLSPEPILVDTASPSPMETSG CAPAEEEDLCQAFSDVILAVNDVDAEDGADPNLCSEYVKDIYAYL RQLEEQQAVRPKYLIGREVGTGNMRAILIDWLVQVOMKFRLLQET MYMTVSIIDRFMQNNCVPKKMLQLVGVTAMFTASKYEEMYPPEI GDFAFVTDNTYTKEQIRQMEMKILRALNFGLGRPLPLHFLRRAS KIGRVDVQEHTLAKYLMELTMLDYDMVHFPPSQAAGAFCLALK ILDNGEWTPTLQHLYSYTEESLLPVMQHLAKNAAMVNQGLTKHM TVKKNYATSKHAKISTLPQLNSALVQDLAKAVAKV
5592	242	924	YGE3KRDWNQKDLISALVLTNTVNCLEPTPIMAKSAEVKLAIFGRAG VGKSALVVRFLTKRFIWEYDPTESTYRHQATIDDEVVSMEILD TAGQBDTIQREGIMMRGEFVLYVYDITDRGSFEEVLPPLKNILDE JKKPKNVTLLVVGNKADLDSRQVSTEEGEKLAELACAFYEC ACTGEGNICEIFYELCREVRRRRMVQGKTRRSSSTTHVKQAINK MLTKISS
5593	3	1113	HASGGRAANMAAERGAGQQQSQEMMEVDRRVESEESGDEEGKKH SSGIIVADLSEOSLKDGEERGEEDPSEEHELPVDMETINLDRDAE DVDLNHYRIGKIEGFEVLKKVKTLCRLQNLIKCIENLEELQSLR EIDLYDNQIKKIEENLEALTELEIIDLISFNLLRNIEGVDKLTRLK KLFVNKNKISKIENLNSNLHQIQLMELGSNRIRAIENIDTLTNLE SLFLGKNNKITKLQNLDAUTNLTVLSMQSNRLTIEGLQNLVNL EYLISHNGIEVIEGLENNNKLTMEDIAASNRIKKIENISHLTELQ EFWMNDNLLESWSLDDELKGARSLETVYLERNPQKDPQYRRKV

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5594	3	1113	MLALPSVRQIDATFVRF HASGRAANMAAERGAGQQQSQEMMEVDRRVESEESGDEEGKKHSSGIVADLSEQSLKDGERGEEDPEEEEELPLPVDMETINLDRDAEVDVLNHYRIGKIEGFEVLKVKVTLCLRNQNLIKCIENTEELQSLRELDLYDNQIKKIEENLEALTELELIDISFNLLRNIEGVDKLTRLKKLFLVNNKISKIENLSNLHOLQMLELGNSNRIRAIENIDITLNLESFLGKGNKITKLQNLDALTNTLVLSMQSNRLTKEGLQNLVNRLELYLSHNGIEVIEGLENNNLTMLDIASNRRIKKIENISHLTELQEFWLMNDNLLESWSLDDELKGARSLETVYLERNPLQKDPQYRRKVMLALPSVRQIDATFVRF
5595	3	1476	ARWNGRNVQVPANPGPGCGTNASGERQRQLPRAWRPVGRTLGSEPIALANSPLLYLFPIPLPSWAVSQSPTPTLGMFADLDYDIEEDKLGIPTVPGKVTLQKDAQNLIGISIGGGAAQYCPCLYIVQVFENDTPAALDGTVAAAGDEITGVNGRSIKGKTKVEVAKMIQEVEVKGEVTIHYNKLQADPKQGMSLDIVLKKVHLRVENMSSGTADALGLSRAILCNDGLVKRLEELERTAEYLKGMIETHTKNILRAFYELSQTHERAFGDVFSVIGVREPQPAASEAFVFKFDAHRSIEKF GIRLLKTIPMLTDLNTYLNKAI PDTRTLTIKYLDVKFEYLSYCLVKEMDDEEYSCIALGEPLYRVSTGNYEYRLLRRCRQEARAFSQMRKDVKLEKMLLDQKHVQDIVFQLQRLVSTMSKYNDCYAVLRDADVFPIEVDLAHTTLAYGLNQBEFTDGEEEEEEDTAAGEFPSRDTRGAAPLDKGGSWCDS
5596	698	219	GAVLAPSSLPAELAAQGESQSLEDLSNTSRPTSEVVKISFI PPGDKYDGDCRTSSGIYERNGIGIHTTPNGIVYTGSWKDDKMNGFGRLEHFSGAVYEGQFKDNMFHGLGTYFFPNGAKYTGNENENRVKGEGEYTHIQGTRMDVVTFTFTSCSQT
5597	3	731	ISCKKMAADGQSSL PASWRSVTLTHVFPAGDLSGHLLAYLSLSPVFVIVGFBVIIIFKRELHTISFLGLLALNEGVNWLIKNVIQEPRPCGGPHTAVGTKYGMPSHSQFWMFFSVSFLFLYLRMHOTNNARFLDILLWRHVLSLGLLAVAFLVSYSRVLVYLLHTWSQVLYGGIAGGLMAIAWFIFTQEVLTPLFPRIAANWPVSEFFLIRDTSLIPNVLWFETYVTRAEARNRQRKLGTQKLO
5598	326	2440	GIGPIIAASFIFCKVASLYIFLSPPPPSVSGVPYSPANSSW CALVPLLGSVPPHPPPPAPSPCCSGQTMLKMLSFKLLLALVALGFFEGDAKFGERNEGSGARRRRCLNGNPPKRLKRRDRRMMSSQLELLSGGEMLCGGFYPRLSCCLRSDSPGLRLENKIFS VTNNTECGKLL EIKCALCSPHSQSLFHSPEREVLERDLVPLLLCKDYCKEFFYTCRGHIPGFLQTTADEFCFYARKDGGLCFPDFPRKQVRGPASNYLDQMEEYDKVEEISRKHKHNCFCIQEVSGLRQPGALHSGDGSQR LFILEKEGYVKILTPEGEIFKEPYLDIHKLVQSGIKGGDERGLLSLAFHFMNYKKNGKLVSYTTNQERWAIGPHDHILRVVEYTWSRKNPHQVDLRTARVFL EVAELHRKHLGGQLLFGPDGFLYIILGDGM ITLDDMEEMDGLSDFTGSVLRDVDTDMCNPVPSI PRSNPHFNS TNQPPEVFAHGLHDPGRCAVDRHPTDININTLCSDSNGKNS SARILOIIKGKDYESEPSLLEFKPFSNGPLVGGFVYRGQCQSERLYGSYVFGDRGNNFITLQQSPVTQKQWQEKPLCLGTSGSCRGYFSGHILGFGEDELGEVYIILSSSKSMTQTHNGKLYKIVDPKRPLMPEE CRATVQPAQTLTSECSRCLCRNGYCTPTGKCCSFGWEGDFCRTG
5599	326	2440	GIGPIIAASFIFCKVASLYIFLSPPPPSVSGVPYSPANSSW CALVPLLGSVPPHPPPPAPSPCCSGQTMLKMLSFKLLLALVALGFFEGDAKFGERNEGSGARRRRCLNGNPPKRLKRRDRRMMSSQLELLSGGEMLCGGFYPRLSCCLRSDSPGLRLENKIFS VTNNTECGKLL EIKCALCSPHSQSLFHSPEREVLERDLVPLLLCKDYCKEFFYTCRGHIPGFLQTTADEFCFYARKDGGLCFPDFPRKQVRGPASNYLDQMEEYDKVEEISRKHKHNCFCIQEVSGLRQPGALHSGDGSQR LFILEKEGYVKILTPEGEIFKEPYLDIHKLVQSGIKGGDERGLLSLAFHFMNYKKNGKLVSYTTNQERWAIGPHDHILRVVEYTWSRKNPHQVDLRTARVFL EVAELHRKHLGGQLLFGPDGFLYIILGDGM ITLDDMEEMDGLSDFTGSVLRDVDTDMCNPVPSI PRSNPHFNS TNQPPEVFAHGLHDPGRCAVDRHPTDININTLCSDSNGKNS

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			SARILQIIKGKDYSEPSLLEFKPFSNGPLVGGFVYRGCGQSERL YGSYVFGDRNGNFLTLQQSPVTQKQWQEKPCLTGTSRCGYFSG HILGFGEDELGEVYLSSSKSMQTQHNGKLKYIVDPKPLMPEE CRATVQPAQTLTSECSRLCRNGYCTPTGKCCSPGWEGDFCRTG
5600	1977	1244	SLRVLSGHLMQTRDLVQPDPKPASPKFIVTLDGVPSPPGYSMDQE EDMCFEGMKPVNQTAASNKGRLGLLHPQQLHLRSRQLEDPNGSF SNAEMSELSSVAQKPEKLLERCKYWPACKNGDECAYHHPISPCKA FPNCKFAEKCLVFHPNCKYDAKCTKPDPCFTHVSRRIPVLSPKP AVAPPAPPSSQLCRYFPACKKMECPCPFYHPKHCRFNTQCTRDC TFYHPTINVPPRALWKIRPQTSE
5601	1977	1244	SLRVLSGHLMQTRDLVQPDPKPASPKFIVTLDGVPSPPGYSMDQE EDMCFEGMKPVNQTAASNKGRLGLLHPQQLHLRSRQLEDPNGSF SNAEMSELSSVAQKPEKLLERCKYWPACKNGDECAYHHPISPCKA FPNCKFAEKCLVFHPNCKYDAKCTKPDPCFTHVSRRIPVLSPKP AVAPPAPPSSQLCRYFPACKKMECPCPFYHPKHCRFNTQCTRDC TFYHPTINVPPRALWKIRPQTSE
5602	246	766	YHTSCTVWRATAKEALENTEVPGCLMVYNNEVVGKGRNEVNQTK NATRAHAEVMAIDQVLDWCRCQSGKSPSEVFETTVLTYVTEPCIMC AAALRLMKIPLVVYGCNERFGCGSVLNITASADLPNTGRPFQC IPGYRAEEAVEMLKTFYKQENPNAPKSVKRKKECQQILNMF
5603	1	565	FRGRTPISGGGERGCAQYPIPATPARSGENRTMPGAGDGGKAPAR WLGTGLLGLFLPVLPTLSLEVSGKATDIYAVNGTEILLPCTFSS CFGFEDLHFRWTYNSSDAKILIEGTVRNEKSDPKVTLKFDDDRITLVGSTKEKRNINISIVLRDLEFSDTGKYTCHVKNPKENNQLQHHA TIFLQVVDERRMQ
5604	1	1506	EDIFPAQLLKQLRHERVWQQEPPVRDHRSWGSGAGGVAGREWTDQGQVALGGHYMAEGEGERGYFAMSEDELACSPYIPLGGDFGGGDFGGDFGGDFGGDFCGQGDFFGGGSGFGGHCLDYCESPTAHCVNLNWEQVQRLDGILSETIPIHGRGNFPTLIELQPSLIVKVVRRLAERKRIGVRDVRLNGSAASHVLHQDSLGLGYKDLDLIFCADLRLGEGEFQTVKDVVLDCLLDFLPEGVNEKEKITPLTLKEAYVQKMVKVCNDSRWSLISLSNNSGKNEVKFVDSLKRQFEFSVDSFQIKLDSLILLYECSENPMETFHPTIIGESVYGFQEAHDLCNKIIATRNPEEIRGGGLLKCYCNLLVRGFRPASDEIKTLQRYMCSSRFIDFSDIGEQQRKL ESYLQNHFVGLEDRKYEYLMTLHGVVUNESTVCLMGRHERRQTLNLITMLAIRVLADQNVIPNVANVTCYYQPAFYVADANFSNYIAQVQPVFTCQQQTYSTWLPCN
5605	35	1821	SQRSCPSPFSSPAPPWARCSNPDSRTGGVPVPRAWSAGGPALGLMAAPVRLCRKRPLPACPNPFLFVRWLTERWDRDEATRSRHRTRFVFO KALRSLRRLYPLPLRSGKEAKILQHFGDGLCRLMLDERLQRHRTSGGDHADPSPSGENSPAPQGRLAEVQDSSMPVPAQPKAGGGSYWP ARHSGARVILLVLYREHLLNPNGHHLITKEELLQRCAQKSPrVAP GSARPWPALRSLLHRNLVLRTHQPARYSLTPEGLELAQKLAENSEGLSLLNVGIGPKPEPPGEETAVGAASAELASEAGVQQQPLERLGEYRLLCVDIGETRGGGHRRPELLRELQRHLVHTVTRKLHVGD FWVVAQETNPRDPANPGEVLVDHIVERKRLDDLCSSIIDGRFREQKFRLKRCGLERRVYLVEEHGSVHNLSLPESTLLQAVINTQVIDGFFVKRTADIKESSAAYLALLTRGLQRLYQGHTLRSRPWGPNGNPE SGAMTSNPPLCSLLTFSDFNAGAIKNAQSVREVFARQLMQVRGSVGEKAALVDRYRSTPASLLAAYDACATPKEQETLLSTIKCGRQLNLGPALSRTLSQLCYGQPLT
5606	3	1099	GRSRCPGPARGGTTMSPRSLRSLLLVFAVFSAAASNWLYAKLSSVGSISEEETCEKLKGLIQRORVOMCERNLEVMDSVRRAQQLIAIECQYQFRNRRWCNSTLDSLPVFGKVTQGTREAAFVYAISSAGVAFAVTRACSSGELEKCGCDRTVHGVPSCQGFQWGSCESDNIAYGVAFSQSFVDVRERSKGASSSRALMNHLNNEAGRKAILTHMRVEC KCHGVSGSCEVKTCWRRAVPPFRQVGHALKEKFDFGATEVEPVRVGSSRALVPRNAQFKPKHTDEDLVLVYLEPSPDFCEQDMRSRGVLGTRGRTCNKTSKAIDGCCELLCCGRGFHTAQVELAERCSCFKFHCCFVKC RQCQLRVELHTCR

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5607	521	141	PPVCNPNAEAMPSPGTVCSSLGGMLWLDLAMAGSSFLSPEHQRVQQRKESKKPPAKLQPRALAGWLRLPEDGGQAEGAEDLEVRFNAPFDVCIKLSGVQYQOHSQALGKFLQDILWEEAKAEPADK
5608	2	983	WFQSPLRQADPGPPRHTLFMDFVAGAIGGGVCGDAVGYPPLDTVKVRIQTEPKYTGIWHCVRDTYHRERVWGFYRGLLLTVTSLVSSEVFGTYRHCLAHICRLRFGNPDAKPTKADITLSCASGLVVRVFLTSPTEVAKVRLQTQAOAQKQORRLSASGPLAVPPMCPVPPACPEPKYRGPLHCLATVAREEGLCGLYKGSSALVLRDGHSFATYFLSYAVLCEWLSPAGHSRDPDVPGVLVAGGCAGVLAWAATPMVDVIKSRLQADGQGQRRRYRGILLHCMVTIVREEGPRLFKGLVLCRAFPVNMVVFVAYEAVLRLARGLLT
5609	1628	304	AKGVVVLPSPPPREGALVSGSLRRGRSGTSWRPFRMHNSKRIREAKRSARPELKDSLWDTRHNYYESFSLSAAVADNVERADALQLSVEEFVERYERPYKPVVLNNAQEGWSAQEKWTLERLKRKYRNQKFKCGEDNDGYSVVKMKMKYYIEYMESTRDDSPLYIFDSSYGEPDKKRKLLEDYKVPKFFTDDFLQYAGEKRRPPYRFVMGPPRSGTGJIDPLGTSAWNALVQGHKRWCLFPSTPRELIKVTDRDEGGNQDEAITWVNVIYPRTLQPLTWPPFEKPLEILQKPGETVFPGGWWHVVLNLDTTIAITQNFAASNTFPVWVKTVRGRPKLSRKWYRILKQEHPPELAVIDSVDLQESTGIASDSSSDSSSSSSSSSDSECESGSEGDTVHRRKKRTCSMVGNGDTSQDDCVSKERSSSR
5610	54	1196	LERTPASADMAWTKYQLFLAGLMIVTGSINTLSAKWADNFMAEGCGGSKEHSFQHPFLQAVGMFLGEFSCLAIFYLLRCRAAGQSDSSVDPQQPFPNPLLFLPPALCDMTGTSIMYVALNNTSASSFQMLRGAVIFTGLFSVAFLGRRRLVLSQWLGLATIAGLIVVGLADLLSKHDSQHKLSEVITGDLIIIMAQIIVAIQMVEEKFVYKHNVHPLRAVGTEGLFGFVILSLLLPVPMYYIPAGSFGSNPRGTLEDALDAFCQVGOOPLIAVALLGNISSIAFFNPFAGISVTKELSATTRMVLDLRTVVIWALSALGWEAFHALQILGFLILIGTALYNGLHRPLLGRLSRGRPLAESEQEERLLGGTRTPINDAS
5611	2	577	FVLPNRGLGIPGSTFRGPGACASSSLAASAKPGAGGSPALAMSGELSNSRFQGGKAFLGKARQERRLAEBINREFLICDQKYSDEENLPEKLTAKEKYMEDFLNNEGEIDLMSLKRMMMEKLGVPKTHLEMKKMISEVTGGVSETDISYRDFVNMMGLKRSAVLKLVMMFEGKANESSPKPVGPPPERDIASLP
5612	1	721	ASRDGYMDATIAPHRIIPPEMPQYGEENHIFELMQAMWLCKHLNSSLLTENLNLNEFSYTATEARRLYLQRKTVPSALLVQLIQLRLEEDC1KQGWILDGIPETREQALRIQTLGITPRHVIVLSDPTVLIERNLGKRIDPQTGEIYHTTFDWPPPESEIQNRLMVPEDISELETAQKLLEYHRNIVRVIPSYPKILKVISADQPCVDVFYQALTYVQSNHRTNAPFTPRVLLGPVGSI
5613	115	1279	RGVDPALRRAEKMLPLS1KDDYEKPPKFNLFGK1SGWFRSILSDKTSRNLFFFCLNLNSFAFVELLYGIWSNCLGLISDSFHMFDSTAILAGLAASVISKWRDNDAFSYGYVRAEVLAGFVNGLFLIFTAFFIFSEGVERALAPPDVHHERLLLVSILGFVNVLIGIFVFKHGGHGHSHGSGHGHSHSLFNGALDQAHGHVDHCHEVKGHAHSHDHAHGHGHFHSHDGPSSLKETTGPSRQILQGVFLHILADLGSIGVIASAIIQMNPGLMIADPICSLILAILIVVSIVPLLRESVGILMORTPPLLENSLPOCYQRVQQLQGVYSLQEQHFWTLCSDVYVGTKLKIAPDADARWILSQTQTHNIFTQAGVRQLYVQ1DFAAM
5614	3	1268	LLSRNEHACPLQAGLGLTQRKPKAIRGREGATNQQGETQNERAPWGARQLGVMAELOQQLQEFEIPTGREALRGNHSAALLRVADYCEDNYVQATDKRKALEETMAFTTQALASVAYQVGNLAGHTLRLMDLQGAALRQVEARVSTLQGMVNMMHEKVARREIGTLATVQRLPPGQKVIAPENLPLTPYCRRLNFGCLDDIGHGIKDLSTQLSRTGTLSRKSIKAPATPASATLGRREPRPIPEVPHLPVVPDGRSLAASSASSLASAGSAEGVCGCAPTPKGQAAPPAPLPPSLDPPPPPAAVEVFQRPPTLEELSPPPPDEELPLPLDPLPPPPLDGDELGLPPPPGFGPDEPSWVPASYLEKVVTLYPYTSQKDNELSFSEGTVICVTRRY

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5615	9	1558	ALGRRRPGDPREMEAATPAAAGAARREELDMVMPRLINEQNF DGTSDEEHEQELEI_PVQKHYQLDDQEGISFVQTLMLLKGNIKTG LLGLPLA_KNAQAVILVLPISLVPWCLQKQAAWGRSVVDFFLVITQL FKKSTLGYSDTIVSFAMEVSPWSLQKQAAWGRSVVDFFLVITQL GFCCSVYIVFLAENVKQVHEGPLESKVFIFNNSNTNSNPCCRSDV LRIYMLCFLPFIIILVLFIRELKNLFVLSFLANVSMAVSLVIYQ YVVRNMPDPHNLPVIVAGWKYPLFFGTAVFAFEFIGVVLVPLENQ MKESKRFPQALNIGMGIIVTLLVTLATLGYMCFHDEIKGSITLN LPQDVWLVYQSVKILYSGFIVFTYSIQFYVPAEIIIPGITSKFHT KWKQICEFGIRSLVTSITCAGAIIIPRLDIVISFVGAVSSTLA LILPPLVETLTFSKEHYNIWMLKNISIAFTGVGVGFLLGTYITV EEIIYPTPKVVAAGTPQSPFLNLNSTCLTSGLK
5616	1	719	DDFVRCPGPQSAAMGASARLLRAVIMGAPCGSGKGTVSSRITTHFE LKHLSGGDLLRDNMLRGEIGVLAKEAFIDQGKLIPDDVMTRLAL HEKLNLTQYSWLLDGFPTLQAEALDRAYQIDTVINLNPVFEV IKQRLLTARWIHPASGRVNYIEFNPPKTVGIDDLTGEPLIQREDD KPTFTVIKRLKAYEQTCKPVLEYQQKKVLFETSGTETNKIWPYV YAFLQTKVPQRSQKASVTP
5617	176	765	PWRGRGSRPRGAGAMAEEQVNRSAGLAPCEASATAETTVSSVG TCEAAGKSPEPKDYDSTCVFCRIAGRQDPGTELLHCENEDLICF KDIKPAAUTHHLYLVPVKKHGNRCTLRKDQVELVENMVTVGKTI ERNNFTDFTNVRMGFHMPPFCISIHLHLHVLAQVJQLGFLSKLV YRVNSYWFITADHLLIEKLRT
5618	3	1692	YLNYINLKSENKISGKEDLWEKLQYLWKSITNLPEDLRVPDES LFLNSGGDSLKSIRLLSEIEKLVGTSPVPGILEIILSSSILEIYN HILQTVVPDDEVTFRKSCATRKRLSNNQEEASGTSILHQKAIMT FTCHNEINAFAVVLRSRGSQLILSNNSTRFLTKLGHCSSACPSDSVS QTNIQNLKGLNSPVLIGKSKDPSVCVKSEBGKPAIGTOKMELH VRWRSDTGDCKVCDASPLVNPFTGKVVTTVYIGSHSHRMKADEVY SGKVVKWEQILGDRIERSSACVSKCGNFIVVGCYNGLVYVLKNSNG EKYWMFTEDAVKSSATMDPTGTLIYIGSHDOHAYALDIYRKKC VWKSCKGGTVFSSPCLNLIIPHLYFATLGGLLLAVNPATGNVI KHSCGKPLFSSPQCCSYQICIGCVDGNLLCFTHFGEQVWQFSTS GPIFSSPCTSPEQKIFFFGSHDCFIYCCNMKGHLQWKPEFTTSRV YATPFAFHNYSNGNEMLAASTDGKVWILESQSGSQLQSQVYELP GEVFFSPVVLBESMLIIGCRDNYVYCLDLLGNNQK
5619	2160	1477	DSPVLPPTSGNVISTAQPAQFWSAVEAALRSLGSPPGAGRCPCP AQSLHSHQQLAAWDPLKPSLRSYPPLHQLQPHQPLRLSNTASSGHLGR RSCPQPRPLELLRAGSSTRPQPLTSSCCGMSCMYSFLGHCSVL LWGTKGGRGSGSPSSPGCCLHPQAQHSQDLPVHVDPVGWQPPGLP TVGLRPGLLGERQRGALRAGDPQCQCPPLPATVREDLGVPSPWAA ECSPPATP
5620	930	182	PLPPPTLAMFLTRSEYDRGVNTFSPEGRLFQVEYAIETAKLGST AIGIQTSEGVLCAVEKRLTSPMEPSSIEKIVEIDAHIGCAMSG LIADAKTLIDKARVETQNHWFYTNETMTVSVTQAVSNLALQFG EEDADPGAMSRRPGVALLFGVDEKGPKLHFMDPSGTFVQCDAR AIGSASEGAQSSLQEVYVHKSMSTLKEAIKSSLILKQVMEEKLNA TNIELATVQPGQHMFMTKEELEEVVKDI
5621	3	819	VVEFVEYATDANVKNESSLSSVQQLGIKMTVRYGKFLSLKLKDGA ENDLTWVLKHcerFLKQQCTIKSSLLCQGNYAGHDWVSSLF MIMLGDKETKTFQFLHQFSRLLTSFLWLPRLHISSYLPNDTVES GIHPVYFCSTHYIEMLLKAELPLVFSAFHMSGFABSQICLQWIT QCFWNYLDWIEICHYIATCVFLGPDYQVYICIAVFKHLQDILQ HTQTQDQVFLKEEALHGFRVSDYFEYMEILEQNYRTVLLRDRM NIRLOST
5622	1122	456	AASTKDAVSRRKRSHSASEKSGTGTISIKSRLNMNPQIRNPMKAMY PGTFYQFKNLWEANDRNETWLCTFVEGIKRRSVVSWKTVFRN QVDSETHCHAERCFLSWFCDDILSPNTKYQVTWYTSWSPCPDCA GEVAEFLARHSNVNLTIFTARLYYFQYPYCQEQGLRSLSQEGVAV

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			EIMDYEDFKYCWNFVYNDNEPFKPWKLTKNFRLLKRRILRESLQ
5623	3	954	FLPPFTIRAPKISRNGQWLFTTPFPFANKALPGWECIVPACFWRKKILTPSTGTQMELLQVTILFLLPSICSSNSTGVLEAANNSLVVTTKPSITTPNTESLQKNVVTPTGTTPKGTITNELLKMSLMSTATFLTSKDEGLKATTTDVRKNDSIISNVNTVTSTLPNAVSTLQS SKPKTETQSSIKTEIPGSVLQDASPSTGTGTLTSIPVTIPENTSQSQVIGTECGGNASTSATRSYSSIIILPVVIALIVITLSVFVLVGLYRMCKADPGTPENGNDQPQSDKESVKLTVKTISHESGEHSAQGKTKN
5624	159	898	PGVAAAAGALPQYHGFAPALVSCRRELSLSAGSLQLERKRKDFTSSGRKLYFDTHALVCCLLEDNGFATQAEIIIVSALVKILEANMDIVYKDMVTKMQQEITFQQVMSQIANVKKDMILEKSEFSALRAE NEKIKLELHOLKQVMDEVIKVRTDTKLDFNLKSRVKELEYSLNEKKLLELRTEIVALHAQQDRALTQCDRKIETEVAGLKTMLESHKLDNIKYLAGSIFTCLTVALGFYRIWI
5625	1	1180	TIPSSAAQARAGPAPAGALEALSPGGARAHAAERRGEMRATPLAAPAGSLRKRLLEDDNLDTTERPVQKARSGPQPRLLPPCLLPSPPTAPDRATAVASRLGPVYLLEPEEGGRAYQALHCPTGTEYTCRVYPVQEALAVLEPYARLPPKHVARPTEVLAGTQLLYAFFTRTHGDMHSLVRSRHRIPPEAAVLFRMATALAHCHQHGLVLRDLKLCRFVFADRERKKLVLENLEDSCVLTGPDDSLWDKHCAPAYVGPEILSSRASYSGKAADVWSLGVAFITMLAGHYPFQDSEPVLLFGKIRRGAYALPAGLSPARCLVRCLLRREPAERLIATGILLHPWLRQDPMPLAPTRSHLWEAAQVVPDGGLDLEAREEEGDREVVLYG
5626	3123	2011	PPRALGSVAMENQVLTPHVYWAQRHRELYLRVELSDVQNPAISITENVLFHKQAGHGAKGDNVYEFHLEFLDLVKPEPVYKLTQRQVNITVQKKVSQWWERLTKQEKRPLFIAPDFDRWLDESDAEMELRAKEEERLNKLRLESEGSPETLTNRKGYLFMYNLNVQFLGSWIFVNLTIVRFCILGKESFYDTFHTVADMYYFCQMLAVVETINAAIGVTTSPVLPSPLIQLLGRNFILFIIFGTMEEMQNKAVVFFVFLWSAIEIFRYSFYMLTCIDMDWKVLTWLRYTLWIPLYPLGCLAEAVSVIQSIPINETGRFSFTLPYPVVKIKVRFSSFLQIYLIIMIFLGLYINFRLYKQRRRRYQKKKKIH
5627	3123	2011	PPRALGSVAMENQVLTPHVYWAQRHRELYLRVELSDVQNPAISITENVLFHKQAGHGAKGDNVYEFHLEFLDLVKPEPVYKLTQRQVNITVQKKVSQWWERLTKQEKRPLFIAPDFDRWLDESDAEMELRAKEEERLNKLRLESEGSPETLTNRKGYLFMYNLNVQFLGSWIFVNLTIVRFCILGKESFYDTFHTVADMYYFCQMLAVVETINAAIGVTTSPVLPSPLIQLLGRNFILFIIFGTMEEMQNKAVVFFVFLWSAIEIFRYSFYMLTCIDMDWKVLTWLRYTLWIPLYPLGCLAEAVSVIQSIPINETGRFSFTLPYPVVKIKVRFSSFLQIYLIIMIFLGLYINFRLYKQRRRRYQKKKKIH
5628	75	1455	VAGAMASKCLKAGFSSGSLKSPGGASGGSTRVSAMYSSSPCKLP SLSPVARSFSACSVCGLGRSSYRATSCLPALCLPAGGFATSYSGGGGWFGEGLTGNEKETMQSLNDRLAGYLEKVRQLEQENASLESRIREWCEQQVYPYMCVDYQSYFRTIEELQKKTILCSKAENARLVEIDNAKLAADDFRTKYETEVSLRQLVESDINGLRRILDDLTLCKSDLEAQVESLKEELLCLKKNHEEEVNSLRCQLGDRLNVEVDAPPVDLNRVLEEMRCQYETLVEENNRRDAEDWLDTQSEELNQOVVSSSEQLQSCQAEIIELRRTVNALEIELQAOHQHSMRDALESTLAETEARYSSQLAOMCQMITNVEAQLAEIRADLERQNQFHYQVLLDVRARLEC EINTYRGLLESEDSDKLPCNPACPSPSKSCLPCLPAACCGPSAARTNCASRPICVPCPGGRF
5629	2287	938	GRPRSSSDNRNFLRERAGLSSAAVQTRIGNSAASRRSPAARPPVPAPPALPRGRPGTEGSTSLASAFLVVAVAVVVVVSAVANAMA NYIHVPPGSPEVPLKNVTQDQEERCREGALSLLQHLRPHWDPQEVTLOLFTDGTINKLIGCYVGNTMEDVVLVRILYGNKTELLVDRDEEVKSFRVLQAHGCAPOLYCTFNNGLCYEFIQGEALDPKHCVCNPAIFRLIARQLAKIHAIHAHNGWIPKSNLWLKMKGKYFSLIPTGF

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			ADEDINKRFLSDIPSSQILQEEMTWMKEILSNLGPSPVVLCHNDL LCKNIYNEKQGDVFIDYEVSGNYLAYDIGNHNFNEFAGVSDV DYSLYPDRELQSOWLRLAYLEAKEFKGFGTEVTEKEVEILFIQV NQFALASHFFWGLWALIQAKYSTIEFDLGYAIVRFNQYFKMKP EVTLKVPE
5630	1194	278	GFWIAQTCAHHLPPGSPWLVPASPWRLPEMSSFGYRTLTVALF TLICCPGSDEKVFEVHVPRPKLAVEPKGSLEVNCSTTCNQPEVG GLETSLDKILLDEQAQWKHYLVSNISSHDTVLQCHFTCSGKQESM NSNVSVYQPPRQVLITLQPTLWAVGKSFTIBCRVPTVEPLDSL LFLFRGNETLHYETFGKAAPAFOBATAATFNSTADREDGHNRNFSC LAVIDLMSRGGNIFHKHSAPKMLBIEPVPSDSQMVIIVTVVSVL LSLFVTSVLLCFIFGQHLRQQRMGTYGVRAAWRRLPQAFRP
5631	1053	290	SRVDDFVRPEPSRAEPSRSRGRRPARRAATMSVFGKLFGAGGGK AGKGGPPTPQEAIQLRDLTEEMLSKQEOFLEKKIEQELTAAKHG TKNKRAALQALKRKRYEKQLAQIDGTLSTIEFQREALENANTN TEVLKNMGYAKAMKAAHNDMDIDKVDELMQDIADQQELAEEIS TAISKPVGFGEEDEEDELMAELEELEQEELLKNLLEISGPETVP LPNVPSTIALPSKPAKKKEEEDDM.KELENWAGSM
5632	3	952	VVLGWSPPPRLWVGSLGAAORPAVPVSGLARSLSHVETRRPHRA SVRVARGRLGVWAQPQPLLFRPVGSRRFMQPPGPPPAYAPTNGD FTFVSSADAEDLGSSTIASPDVKLNLLGGDFIKESTATTFLRQGY GWLLEVEDDDPEDNKPLLEIDLKDIIYKIRCVLMPMPSLGF NRQVVRDNPDFWGFLAVVLLFFSISMISLYGQFRVVSIIITIWFGS LTIFILLARVLGGEVAYGQVLGVIGYSSLPLIVIAPVLLVVGSE VVSTLLIKLGVFWAAYSAASLLVGEEFKTKPPLLIPFLYIY FLSLYTGV
5633	771	460	QGCSTKTMVSGRPFYRSSEFMEQLLSSHLHQVPPFCCFTVVCLOCN CLFENSVSKLYMLCFNFFMSIFFYSLSITKLNLIYLWGLSYQL LLL.LLSGHRPWGSMSM
5634	1446	855	PRATGRIRSRAASRPRACAGAGASGAEPRSGRERSRLSGRAPAM ARNTLSSRFRVVDIDEFDENKVFDEQEAAAAAEGPDPSEVD GLLRQGDMLRAFHAAALRNSPVNTKNQAVKERAQGVVLKVLTNFK SSEIEQAVOSLDRNGVDLLMKYIYKGFEKPTENSSAVLLQWHEK ALAVGGLGSIIIRVLTARKTV
5635	3	943	DRGPRSTADTGRARVSFWRFPLDPGVKNSNVQITSGEKRRFRTL RSLFHPFPVTRSGAPRAVLVGSWSPAKMVAPAVKVARGWGLAL GVRRAVLQLPGLTQRVWSRYSPEFKDPLIDKEYYRKPVVEELTEE EKYVRELKKTOLIKAAPAGKTSVFPDVISKFTNMMMIGGNKV LARSLMIOTLEAVKRQFELYHAASAEQATIERNPYTIFHQAL KNCEPMIGLVPILKGGRFYQVPVPLPDRRRFLAMKWITECRD KKHQRTLIMPEKLSHKLLEAFHNQGPVIKRKHDHLKMAEANRALA HYRWW
5636	2253	1143	LEDITCQHPPAEKKLYLYHRKLREVERNGIPRLPKDVFMDTHQG LTDVIRAKVTGFSEGVVDSVKGGFSSFSQATHSAAGAVVSKPREI ASLIRNKFGSADNIPNLKDSLEEQVDDAGKALGVISNFQSSPK YGSEEDCSSSATSGSVGANSTTGGIAVGASSSKTNLDMQSSGFD ALLHEIQEIRETQARLEESFETLKEHYCRDYSLIMQTLQEERYR CERLEEQLNDLTELHQNEILNLKQELASMEEKIAQSYERARDI QEALAEACQTRISKMELQQQQQQVQLEGLENATARNLLGKLTNI LLAVMAVLLVFVSTVANCVVPLMKTRNRTFSTLFLVVFIAFLWK HWDALFSYVERFFSSPR
5637	948	2532	MSFCGARANAKMMAAYNGGTSAAAAGHHHHHHHLPHLPPPHLH HHHHHPQHHLHPGSAAAVHPVQQTSSAAAAAAAAAAMLNPG QQQPYPPSPAPGQAPGAAAAPAQVOAAAAATVKAHHHQHSHHP QQQLDIEPDRPIGYGAFGVVWSVTDPDGKRVALKKMPNVFQNL VSCKRVEREFLKMLCFKHDNVLSALDILQPPHIDYFEEIYVUTE LMQSDLHKIIIVSPQPLSSDHVKVFLYQILRGLKYLHSAGILHRD IKPGNLLVNSNCVLIKCDFGLARVEELDESRHMTQEVTQYYRA PEILMGSRHYNSNAIDIWSVGCIFAELLGRRILFQAQSPIQQLDL ITDLLGTPSLEAMRTACEGAKAHILRGPHQPSLPVLYTLSSQA

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			THEAVHLLCRMVLVFDPYKRISAKDALAHPYLDEGRLRYHTCMCKCCFSTSTGRVYTSDFEVTNPKFDDTFEKNLSSVRQVKEIIHQFILLEQQKGNRVLPLCINPQSAFKSFISSTVAQPSEMPPSPLVWE
5638	125	1155	DRKMSELDQLRQEAEQLKNQIRDARKACADATLSQITNNIDPVGRIQMTRRTLRLGHHLAKIYAMHWGTDSSRLVSASQDGKLIWDSYTTNKVHAIPLRSSWVMTCAVAPSGNYVACGGLDNICSIVYNLKTERGNVRVSRELAGHTGYLSCCRFLDDNQIVTSSGDTTCALWDIETQQTTFTGHTCDVMMSLAPDTRLFVSGACDASAKLWDVREGMCRQFTGHESDINAICFFPNNGNAFATGSDDATCRLFDLRADQELMTYSHDNIICGITSVFSFSKSGRLLLLAGYDDFNCNVWDALKADRAVGLAGHDNRVSCLGVTDDGMAVATGSWDSFLKIWN
5639	125	1155	DRKMSELDQLRQEAEQLKNQIRDARKACADATLSQITNNIDPVGRIQMTRRTLRLGHHLAKIYAMHWGTDSSRLVSASQDGKLIWDSYTTNKVHAIPLRSSWVMTCAVAPSGNYVACGGLDNICSIVYNLKTERGNVRVSRELAGHTGYLSCCRFLDDNQIVTSSGDTTCALWDIETQQTTFTGHTCDVMMSLAPDTRLFVSGACDASAKLWDVREGMCRQFTGHESDINAICFFPNNGNAFATGSDDATCRLFDLRADQELMTYSHDNIICGITSVFSFSKSGRLLLLAGYDDFNCNVWDALKADRAVGLAGHDNRVSCLGVTDDGMAVATGSWDSFLKIWN
5640	280	1092	QQGNKKTMLSHTMMKQRKQQATAIMKEVHGNDVDGMDLGKVSIFRDIMLEELSHLSNRGARLFKMRQRRSDKTYTFENFQYQSRQOI NHSIAMQNGKVGDGSNLEEGSQQAFLTPPNTFDPRSPPPNPDNIAPGYSGPLKEIPPEKFNTTAVPKYYQSPWQAIISNDPELLEALYPKLFKPEGKAELDYRSFNRAVATFGGFKEKASRMVKFKVPDFELLVLTPRFMFSVNLPLSGRRSFNRTPKGWISENIPIVITTEPTDDTTVPESEDL
5641	27	332	CRHNCNGDVKLSSNQMDKLFAFHLLFTFHGLLHFLDGSIQKLIQAEIILSDNSSLVLENNFLFKVKSKQFIHLIAKKFYISITIVSASNGESFVLSMIVTG
5642	199	1247	ITPCRMDFLVLFLFYLASVLMGLVLICVCSTHSKGLARGGAQIFSCIPECLQGRAMHGLLHYLFHTRNHTFIVLHVLPQMVYTEYTWEVFGYCQBELEQQLHLLPYLLGVNLFFFITLCGTNPQGIITKANELLFLHVYEDEVMFPMKVRCSCTCDLRKPARSKHCSVNCVHRFDHHCVWVNNCIGAWNIRYFLIVLTLTASAATVAIVSTTFLVHLVVMSDLYQETYIDDLGHHLHVMDTVFLIQYLFLLTFPRIVFMLGFVVVLFSFLGGYLLFVLYLAATNQTNEWYRGDWAWCQRCPLVAWPSSAEPVHRNIHSHGLRSNLQEIFLPAFPCHERKKQB
5643	1	847	PSGGVWVQLITSGVQONHPGWTVAGQFQEKKRFTEEVIEYFQYKERGTVAEDQLAQMSKQLDMFKTNLEEFASKHKQFIRKNPEFRVQFQDMCATIGVDPLASGKGFWSEMLGVGDFYYELGVQIIIEVCIALKHRNGGLITTLEELHQVQLKGRGKFAQDVSQDDLIRAIKKLKALGTGFGIIPVCGTYLIQSVPAEALNMHTVVQLAEGKNGYVTVEIKASLKWETERARQVLEHLLKEGLAWLDLQAPGEAHYWLPAFTDLYSQEITAEEAREALP
5644	83	1138	PRRMGSWVQLITSGVQONHPGWTVAGQFQEKKRFTEEVIEYFQKKVSPVHLKILLTSDEAWKRFVRVAELPREEADALYEAALKNLTPYVAIEDKDMQKKEQQFREWFLKEFPCIRWKIQUESIERLRLVIANEIEKVHRCVIANVSGSTGILSVIGVMLAPTAGLSLSITAAGVGLGIASATAGIASIASSIVENTYTRSAELTASRLTATSTDQLEALRDILHDITPNVLSFALDFDEATKMIANDVHTLRSKATVGRPLIARWYVPINVVETLRTGAPTRIVRKVARNLCKATSGVLVVLDDVNLVQDSLDLHKGEKSESAELLROWAQELEENLNELTHIHQSLSKAG
5645	537	799	VQSVRDLKRLSPDPPGDSGNRDVTREDPVTGPLNSASSQVTLYLCLQNSLLGHSSVEDARATMELYQISQIRARRGLPRLAVSD
5646	3745	3328	AEQYGTSPLLPTMLSSCLPPANVTTKAATPPPLVLSLTADPAGKPAPCRVTLRLRASIPATKRASFLSSFIKMFFEELEYILGFLSLLLKPHVHVSYSYSAICHFKQEGTGNRSRSFTCTPELFPLQTHLRAEGGAQ
5647	288	800	GVIMATSESCVESEENCERREAFWAEWKDLTLSTRPEEGCSLHEEDTQRHETYHQGQCOQLVQRSPWLMMRMGILGRGLQEYOLPY

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			QRVLPLPIFTPAGMATEKEEREDTPIQQLQELLAETALGGOCVD RQEVAEITKQLPPVVPSKPGALRRSLSRMSQEAQRG
5648	7	1518	VLSELCGRHEALREVGAEEWPPTCSPNICSGLQQAGNTDWSLTM APQSLPSSRMAPLGMLLMAACFLCLSHQNLIKELFALTNPBK SSTKETERKETKAEEELDAEVLEVFPHTHENQALQPQAVPAGS HVRINLQTCREAKEKLQYEDKFRNLLKGKRLDINTNTYTSQDLKS ALAKFKEGAEMESSKEDKARQAEVKRLFRPIEELKKDFDELNVV IETDMQIMVRLINKFNSSSSLEEKIAALFDLEYYYHQMMDNAQD LLSFGGLQVVINGLNSTEPVLKEYAAFVLGAAFSSNPKVQVEAI EGCGALOKLLVILATEQPLTAKKKVLFALCSLLRHFFYAQRQFLK LGGIQLVRLTVQEKGTTEVLAVRVVTTLYDLVTEKMFAAEEAEILT QEMSPPEKLQQYRQVHLLPGLWEQGWCEITVHLLALPEHDAREKV LQTLGVLLTTCRDRYRQDPQLGRTLASLQAEYQVLASLELDGE DEGYFQELLGSVMSNLKELR
5649	1172	3006	MLQEQLDAINEEIRMHQEEKESTELRAEEIETRVTSGSMEALNL KQJLRKRGSIPTSLTDLSLASASAPPLSGRSTPKLTSRSAAQDLDR MGVMTPSLDRKHRKLLSPVSREENREDKATIKCETSPSSPR TLRLEKLGHGPALSQEEGKSALEDODGSNPSSSNSSQDSLHKGAKR KGIKSSIGRLFGKKEKGRLIQLSRDGATGHVLLTDSEFSMQEPM VPAKLTQAEKDRLKKKHQJFEDARRKGMPFAQWDGPTVWSL ELWVGMPAWYVAACRANVKSGAIMSALSDEIQRIGISNALHR LKJRLAIQEMVSLTSPSAPPTSRTSSGNVWVTHEEMETLETSTK TDSEEGSWAQTLAYGDMNHEWIGNEWLPSLGLPQYRSYFMECLV DARMLDHLTKDRLRVHLKMVDSFHRTSLQYGIMCLKRNLNYDRKE LEKREESQHEIKDVLVWVNDQVHVWQSICLRLDYAGNLHESGV HGALLALDENFDHNTLALILOIPTQNTQARQVMEREFNNLLALG TDRKLDDGDKVFRRAPSWRKRFPRPREHHGRGGMLSASAETLPA GFRVSTLGLTQPPPAPPKIMPEAHSHYLYGHMLSAFRD
5650	1172	3006	MLQEQLDAINEEIRMHQEEKESTELRAEEIETRVTSGSMEALNL KQJLRKRGSIPTSLTDLSLASASAPPLSGRSTPKLTSRSAAQDLDR MGVMTPSLDRKHRKLLSPVSREENREDKATIKCETSPSSPR TLRLEKLGHGPALSQEEGKSALEDQGSNPSSSNSSQDSLHKGAKR KGIKSSIGRLFGKKEKGRLIQLSRDGATGHVLLTDSEFSMQEPM VPAKLTQAEKDRLKKKHQLEDARRKGMPFAQWDGPTVWSL ELWVGMPAWYVAACRANVKSGAIMSALSDEIQRIGISNALHR LKJRLAIQEMVSLTSPSAPPTSRTSSGNVWVTHEEMETLETSTK TDSEEGSWAQTLAYGDMNHEWIGNEWLPSLGLPQYRSYFMECLV DARMLDHLTKDRLRVHLKMVDSFHRTSLQYGIMCLKRNLNYDRKE LEKREESQHEIKDVLVWVNDQVHVWQSICLRLDYAGNLHESGV HGALLALDENFDHNTLALILOIPTQNTQARQVMEREFNNLLALG TDRKLDDGDKVFRRAPSWRKRFPRPREHHGRGGMLSASAETLPA GFRVSTLGLTQPPPAPPKIMPEAHSHYLYGHMLSAFRD
5651	646	1869	ARQGQFWG*EARAKGPASESPRV*EGSGWEGPASP*TGSTL AWGEGAGIR*ASGLTAAGAASAAA/PPPTRGGPAPAGCGRAPP WPAPLRVPTHGRAPAPRSRAAPRALPSHGTAAAALS PASPAGP ADP*LPGHSSSQSPPRG*RWGRRSRSPAPAHPEHPAPAGSASASQ QTPGWPGSTCCLAQGWQAEPLGAPGAEDG\PVPPQRGFPLGTLGS PAGSWAGLAGY*AGAPGTQATAAPRAAGQTVAAPNCRV*GSA PALHRAPAAADPGSFLQAPPRAWASPAAGPGLSSSDYCGGLGA GWRAGISPELLGAACLSDNWARPQPGPQAE*GGQPGCRTIPASA CMPSPVEGSSLGLSRKGHDLPQSAR*GWHECRRARHLVPLPRL LGPRGRTRGPSSPS
5652	735	343	HHKKYOHITHQKSFSCPEPACGKSFMFKHLKEHMKLHSDTRDYI CEFCARSFRTSSNLVIHRRRIHTGEKPLQCEICGFTCRQKASLNW HQRKHAETVAALRFPCFECGKRFKEPKDPSVAHRSKSHPALLA
5653	66	1401	RGRILQSRGRLLTGLVLLLDILGARQHGQRVSHGWKGFLTAPL CFQPQCPGTRRRGRRSLKEATEQOLAMAEEFVTLKDVGMDFTL GDWEQGLLEQGDTFWDTALDNQCDLFLLDPPRPNLTSHPDGSED LEFLAGGSPEATSPDVETKNSPLMEDFFEEGFSQEISRDVIQ GWLLELOFRRSLYRGLHVR*FARRSRKSSEV*YCHQRGKSHGMQ

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			ES*I KERTQSCVH RFHGRRFHG\DNVSEKTLTPAKSKRYRGEFF SYSDHSQQDSV OEGEKPVQCSEC GKSFSGSYRLTQHWITHTREK PTVHQCECQGFDRKASHSGYPKHTGYKFYVCNEYGTFPSQSTY LW HQKTHAGEKPKCSQDSDHPPSHDTQSGEHQKTHTDSKS YNCN ECGKAFTTRIFHLTRHQKIIHTRKRYEC SKCQATFNLRKHLIQHQK THAANV
5654	3	598	TLPLFPGRRFRGWRRCGAVAARKNSTGGNVSI NQRD S VRMSAL NWKP FVYGLLASITAE CGT PIDLTKTRPQI QGQTNDAKFKEII YRGMLHALVRIGREEGLKALYS G*VGLHAFLCHCSLFHMGIDFR PRLHRSQVKSLRCV*KEQIA**/MFSLLISTLISKYI YYAADVL EKLFFYYI QVQTDNNKKICL FKNI
5655	2	867	RPPGIRAPQLH PAA GRPRDASARPFRPTVLLHD PFQLS FPPP PLSPYPSVFAVARVL PQRSGDYRAAGMPQLSGGGGGGGDPELC ATDEMIPFKDEGDPQ\REK IFAEIVNP EEEGDLADIKSSLVNES EII PASNGHEVARQA QT SEQ PYHD KAREHPDGD KHPDGGLYNK G PSYSSYSGYIMMPNMNNDPYMSNGSLS PPI PRTSNKVPVVQPSH AVHPLTPLITYSDEH FSPGSHPSHIPSDVNSKQGMSRHP PAPDI PTF YPLSPG GGGQITFPPLCWLQGQP
5656	228	1066	PTRVPLPFEASGP GAAFFHSGRLQRSLTKDSAGCFSQCRSRAM LVLRSGLTKALASRTLAPQVCS FATGPROYDGTFYBRTYYLK PSNMAFMENLKKNIHLRTS YSELVGFW SVEFGGRITMKVFHIWK YDNFPHRAEV R KALANCKEWQE SII PNLARIDKQETEITYLIP WSKLQPKPKEGVYELAVFQMKGPGPALWGDA FERA INAHVN LGY TKVVGVFHT EYGE LNRVHVLWWNEADSRAAVRHKS HEDPISWG GVRESVNYL\VSQZN M
5657	105	1052	GQRLQS PRVQMPVQPPSKDTEEMEAEGDSAEMNGEEESEER SGSQTEEESEESMDEDYERRSECVSEMLDLEKOFSELKEKL FRERLSQLRLRLEEVGAERAPEYTYEPLGGLQ RSLKIRI QVAGIY KGFC LDVIRNKYECELOQAKQHLESEKLLYDTLQGELQERIQR LEEDRQSLDLSSEWWDKLHARGSSRSDSLPPSKRKKAFLVSG PYIVYMLQEBIDLEWI TA K KARA AVSPQKRKSD\LDPAVHSQ GDPQSSW HCTQDSR LPPAD RRTHRPLRVCPARLLWCCW ALP LHL ALVWTPL
5658	2346	3541	TERRVYNPWP EPDPD/CIQEDPWNLPNSIKTLVDN IQR YVEDGK NQLL I ALLKCTDTELQ L RRD AIFC QALVA AVCTFSEQ LLA ALGY RYNNNGEYBESSR DASRKW L E QVAATGVLLHCQS LLSPATVKEE RTMLEDIWVTLS ELDNVTFSFKQLDENYVANTINVFYHIEGSRQA LKVIFYLD SYHF SKLPSRLEGGS RLH TALFTKVLENVEGLPS PGSOAAE DLQ QDINAQS LKEVQ QYYEKL RAYLERSNLP TDAST TAVKIDQLIRPINALDEL CRLM KS VHPKPG AAGS VGAGLIP IS SELCYR L GACQMVMCGTGMQR STLS VS LEQAILAR SHG L LPKC IMQATD I MRKQGPRV EILAKNLRV KDQMPQGAP RLYR L CQPK MN GDL
5659	2	696	WKRSGEVSPKGELGA W RGNNS GRPKI I G RAAEAE NEDRTL GRL LP GNERSQ PRSP LRLI A P Q IKA EAAADKG L A P V PPPFSS GHG PC \ERE GEQ RGRGRS RRRGAH L E K P S P C L RAGA P TDRG RGG PAEVA AAGGRRM VQKES QATLEER ESELS NPAASAGASLE PPAAPAPG EDNPAGAGG\AAVAGAAGGARRFLCGVVEGFYGRPWVMEQRKEL FRR LQKWE LNTY L
5660	229	853	PVTMWA FSEL PMP LLI N LIVS L LGF VATV TLIP AFRG HFIA RL CGQD L NKTSR Q Q I PESQ GVISGA VFL II LFC F I PPF FL NC FN VKE QRKA FHH E FV ALIGALLA I CCM I FLG FADD VLN L RWRH K L L P TA ASLPLLMVYFTNFGNTTIVV PKP F R P I L G L H D L G R *SYHCC PYGTYFREPFLV L HILLQVFLC L C VFP DP FW
5661	2	473	LNL YLPS PCGGI PKL PGL PREAAA ALGASFL AEAPL PVTV RG SGL AGMAV C DCPKAFLS I CFV TLVFL QLPLASIC QN*GTDSCASRGK ADFDV TGP HAP I LAMAGGH VELQCLFPN I SAED MELR WYRC QP SLA VHM HERGMDM DGEQ K WQYR GRT
5662	2	1318	LRKEGR CRRGSN RG VWAAP A PAEG L G G R G M L G V R C L L R S V R F C S S A PFPKHKPSAKL S V R D A L G A Q N A S G E R I K I Q G W I R S V R S Q K E V L F

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			LHVNDGSSLESLOQVVADSGLDSRELTFGSSVEVQQLIKSPSKRQNVELKAEKIKIVIGNCDAKDFPIKYKERHPLEYLRLQYHFRCRTNVLGSLIRIRSEATAAIHSFFKDGSFVHIHTPIITSNDSEGAGELFQLEPSGKLKVPEENFFNVPAPFLTVSGQLHLEVMSGAPTQVFTFGPTFRAENSQSRSRHLAEFYMIEAEISFVDLSQDLMQVIEELFKATTMMVLSKCPEDVELCHKFIAPGQKDRL*HMLKNNFLISYTEAVEILKQASQNFTTPEWGAIDLRTHEKYLVKHCGNIPVFVINYPLTLKPFYMRDNEGDQPELEGSAV*AHSCLMILLSIVVIGQP
5663	119	698	PADIGRSTAKTPGPPRSLEMDDPRYGMCFLKAGSGCPGAERSLLVQSYFEKGPLTRFDVAIEFSLEEWQCLDSAQQGLYRKVMLENYRNLVFLGTALTKEPDPLITCLEQGKEPNWKRHEMVAKPFVLCSHFPQDLWAEQDIKDSFQEAILKKYGYGHANFQLQKGCKSVDECKVKEHDNKLNQCLIPKKKK
5664	118	572	SLSMESNHKGDGDSGTQKEAALRALVALVORTGYSLVQENGQRKYGGPPPGWDAAPPERGCEIFIGKLPRDLFEDELIPLCEIGKITYEMRMMDMFNGNNNRGYAFVTFSNKVEAKNAIKQLNNYEIRNGRLLGVCASVDNCRLFVGGIPKTKK
5665	347	702	VVQHLLIILHECERTSPAMITSELPVLQDSTNETTAHSAGSELEETEVKGKRGRGPGRPPSTNKKPRKSPGEKSRIEAGIRGAGRGRANGHPQNGEGEPVTLFEVVKLKGKSAMQRC
5666	213	540	VSCLPTCSKMITLNNQDQPVPFNSSHDPDEYKIAALVFYSCIFIIGLFVNITALWVFSCITTKKRTTVTIYMMNVALVDLIFIMTLPFRMFYYAKDEWPFGEYFCQJLGA
5667	1	695	HPLPSASLGLPSVSLGVSLCVRSALLEAVVPMPLPKRRRARVGSPSGDAASSTPPSTRPGVAIYLVEPRMGSRRAFLTGLARSKGFRVLDACSSSEATHVVMEEFTAEEAVSWQERRMAAAPPGCTPPALLISWITESLGAGQPVVPVECRHRLEVAGPSKGPLSPANMPAYACQRPTPLTHNTGLSEALEILAAAGFEGSEGRLLTFCRAASVLKALPSFVTTLSQLO
5668	691	894	CSFLFCIPDPLFLQFLLGRKEEEAVLVGGEWSPLS LDGLPQADPQVLVRTAIRCAQAQTGIDLSGCTKW
5669	407	1	DSGAPEGLSPLSTMSTQECLSMHAHQAYTPFIYLHARKRRGEIGDADSRFNDRYAHKSAAQLYFLYFCWCWIFQDVYYFTIKEKNHFFFPAARGAPTKYSGSPIGSPTTTPRPPSMLHPAPHILLASMQLQKLNSQ
5670	3	373	SSECLTMMAWIPLLPLLILCTVSVASYELAQFSSVSVPQQTAKITCGSDVLAKKYARWFQOKPGPQAPVLVIYKDTTERPSGIPERFSGSTS GTTVTTLTISGAQVEDEADYFCYSATDNFLWVF
5671	280	524	KFPPKKTPPHLGMESETIILWQFLLQQLLDQKHEHLLCWTNSNDGEFKLKA KKVAKLWGLRKNKTNMNYDKLSRALRLLFMT
5672	2	557	FVPATPDPGVWLPLPSRDPAMAKRSSLYIRIVEKGKLPAKDITGSSDPYCIVKVDNEPIIIRIATVWKTLCPFWGEYYQVHLPPTFHAVA FYVMDDEDALSRDDVIGKVCLTRDTIASHPKGKFSLPSHTGLPSPWPPSHSETPLSGSVWSSPAQGKPFLLSPEAGATFCTPGLCSAACSQAWLLLPLP
5673	327	696	ITVADQISHWSAGRIKNRTRIPECIHSSAATTLAGPHTMEGESVKLSSQTLIQAGDDEKNORTITVNPAMHGKAFKVMNELRSKQLLC DVMIVADEVIEAHRVVLAAACSPYFCAMFTGDMSS
5674	17	984	GGGSMEGESTSAVLGFGVLAQHNTDSDETEGFLGEGVKGEAKNSITDSQMDDEVVYTIDIQKYIIPCYQLFSFYNSSGEVNEQA LKKILSNVKKNVGWWYKFRRHSQIMTFRERLLHKNLQEHFSNQDLVFLLLTPSITIESTCSTHRLEHSLYKPQKGFLHRVPLVANLG MSEQLGYKTVSGSCNSTGFSRAVQTHSSKFFEDGSLKEVHKINEMYASLQEELKSICKV ред SEQAVDKLVKDVNRLKREIEKRRGAQIQAAREKNIQKDPQENIFLCQALRTFFFPSNEFLHSCVMSLKD MFLKAVTTTISM
5675	80	753	EGSGRGPTLARLTSARAGRLHFFPGFSSRLIHFRGVSECRPPGKSGVPSA PGSDGKWWERPGMFSLMASCCGWFKRWREPVRKVTLLMVGLDNAGKTATAKGQIYGEPEDVAPTVGFSKINLRQGKFEV TIFDLGGGIRIRGIWKNYYAESYGVIFVVDSSDEERMEETKEAM

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			SEMLRHPRISGKFLVLANKQDKEGALGEADVIECLSLEKLVNE HKCL
5676	2	930	FVSSPPPPRVQPAPRGCGFGLSCRRSLLCQVASTPAHVGVMRSPV RDLARNDGEESTDRTPLLPGAPRAEAAPVCCSARYNLAILAFFG FFIVYALRVNLVALVDMVDSNTLLEDNRTSKACPEHSAPIKVH HNQTGKKYQNDATQGWILSGFYGYIITQIPGGYVASKIGGKM LLGFGLGTAVTLTFTPIAADIGVGPLIVLRALEGGLGEGVTFP A MHAMWSSWAPPERSKLLSISYAGAQLGTVISLPLSGIICYYMN WTYVFYFFGTIGIFFWFLLIWLVSDETPQKHKRISHYEKEYILSS L
5677	1	1028	PPRDGFELRLRSVPLCSGPCPLTSLSRQGERSGGHLVAAARA AVTAETHPLPLLAAPLAIVCQSVKSPAAACQVRPRPRAVALPAALGGP GRSLPGLTAATMSSFSESALEKKLSELNSNSQSVTQLSLWLTHH RKHAGPIVSVWHRELRKAKSNRKLTFLYLANDVIQNSKRKGPF TREFESVLVDAFSHVAREADEGCKKPLERLNLNIWQERSVYGEF IQQLKLSMEDSKSPPPCKATEEKSKSLKRTFQQIQEEEDDYPGSY SPQDPSAGPLLTEELIKALQDLENAASGDATVRQKIASLPQEVO DVSLLEKITDKAEERLSXTVDEACLRNRGEGTS
5678	3	593	SSSPSPTSPSLPLPFYLLLGQLRLQLLWGTAAHLSGAGEAAPCPG GSGRTAAPRTRADPAQSLIMMNMKMKNFKRFSLSVPRTETIEE SLAEFTEQFNQLHNRRRNENLQLGPLGRDPQQECSTFSPTDSGEE PGQISPVGQFQRQNQRRFSMVEVRASGALPQVAGCTHKGVHRR AAALQPDFDVSKRLSLPMDI
5679	2	623	LNSRVDDFVAVPGAIMDEDYGGAAEWGDEADGGQQEDDSGEGE DDAEVQQECLHKFSTRDYIMEPSIFNTLKRYFQAGGSPEVNIQL LSENYTTAVAQTVNLLAEWLIQTGVEPVQVQETVENHLKSLLIKH FDPRKADSIFTEEGETPAWLEQOMIAHTTWRDLYKLAEEAHPDCL MLNFTVKVGRVLELRRKVFMNVYFWLLVCFL
5680	258	592	RRLTSTSEKLQNRNSHTPLESLIHPQPSYKGFGIMFGKKKKIE ISGPNSNFHRVHTGFDPQEQKFTGLPQQWHSLLADTANRPKPMV DPSCITPIQALPMTKIVRGNKPC
5681	45	869	LLCAKTLGVRTKE3QAEGYNRGINNHQAEDPRFCPSFCWMRSA RQTRPQRRLRKEAARPPTPGSCPGGTGMDGKCSVNMFLPLVFTL FTSAGLWIVYFIAVEDDKILPLNSAERKEGVVKHAPYIISIAGDDP PASCVFSQVMNMAFLALVVAVLRFIQLKPKVLNPNWLNIISGLVA LCLASFGMTLLGNFQLTNDEEIHNVGTSLTFGFTLTCWIQAAL TLKVNKINEGRRRVGIPRVLASITLCVGPLLHPHGPKHPHVCS QGPVPGHV
5682	39	622	PSRSCLGTMKWRHREVNLPTEVQQDAVCPAPIPSGGLSAQTGL QKIWGTHCQVCPGAPAWPGSPWHEMGLLILVPLLLLPGSYGL PFYNGFYYSNSANDQNLNGNGHKGDLLNGVKLVVETBEETLFTYQ GASVILPCRYRYEPALVSPPRRVVKWWKLSENGAPEKDVLVAIG LRHRSFGDYQGRVHLRQD
5683	89	778	GSCCATALITRCLAWSVLISRLAMATYTCTICRAFRDADMORA HYKTWDHRYNLLRRKVASMAPVTAEFGQERVRAQRAVAEEESKGS ATYCTVCSKKFASNYENHLKSRRHELEKKAVQAVNRKVEMM NEKNLEKGLGVDSVDKDMANAAIQCQAIKAQPSMSPKKAPPAPAK EARNVVAVGTTGGRGTHD RDPSKPPRLQWFECQAKKLAKHSEDD SEDEEHDL
5684	195	677	TWCFRGYLGPRVIMKALDEPPYLTVGTDVSAYKRGAFCEAKIKT AKRLLVKVKTFRHDSSTVEVQDDHIKGPLKVGAIIVEVKNLDGAY QEAVINLTDASWYTVVFDGDEKTLRRSSLCLKGERHFAESET LDQPLLTNPHEFGTPVIGKKTNRGRRYE
5685	779	1262	LLLQQPVVHCFLLFPPFRFSHHMIPGPGPGHTTGIPHPAIWTPQ VKQEHPHTDSDLMHVKPQHEQRKEQEPKRPHIKPLNAFMLYMK EMRANUVAECTLKEESAINTQILGRRWHALSREEQAKYYELARKE RQLHMQLYPGWSARDNYVSPSSIPVALHS
5686	128	1181	CTWWQVNITLLDINDNHPTWKDAPYYINLVEMTPPSDVITVVA VDPDLGENGTLYVSIQPPNKFYSLNSTTGKIRTTHAMLDRENPD PHEAELMRKIVVSVTDCRGPPLKATSSATFVNLLDLNDNDPTF

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			QNLPFVAEVLEGIPAGVSIVQVVAIDLDEGLNGLVSYRMPVGMP RMDFLINSSSGVVVTTELDRERIAEYQLRVVVASDAGTPTKSST STLTIHVLVDVNDETPTFPAVNVSVSEIVPR\GSGWSG*AARN NDVGLNAELSYFITGGNVDGKFSVGYRDAVVRTVVGLDRETTAA YMLILEAIDNGPVGKRHTGTATVFVTVLVDVNDKRPPIILQSSYV
5687	17	917	AAPPAPPC/FPP/PPPAPPT/PGPAA/APASSCQFRLSAGRAA QGDGGAAAVGHVLVVPAVGPVRVNPGLQTPTVPRPELLPGP\S S LHSDDSSYPPDAGLSDDEEPVDASLPPDPPLTVP/ADA/PMPVT SGCRMPSTSASE/AAGGQGACTHAKGSETPPPASPQTEPAPSP LPPHLTGGPGMYSSEAKLPNSFSCLGLAGTGAGI*GTASAHTG PPVLPHVCTPSLANPQP\AVGPEASSLPLGVSGIGMSA/SAPTS SSPFVAIGSCWLRGIPPPGSGFLCPGRAPGPVPITTHQEGQGP VLDI
5688	1	420	LTKWDLFGNCYRLKLTGIEHGAMPEQVGVWYS/CLYDSRKLF F*SHMIIRSLL*KVIDDSLQLPLLRELLL**LNVIDRCIIILAYV LRVEKTFAITYLKKNFTVKVDFSLGEIPLISMAAILKLWIMKID DGYIPAVF
5689	1504	3	HELSGKHISMVSGNTCNWHPGHSPGGGGQGEITSKDRGEIPAL IWA/RKPIGTWTAKTPTHRAG*GGAEYQPPFQPCBGPRTSTSRG GEG*GHAVGPGRETGKEGSILPFLGPKAALGF*SASCQRAFEFGGAH GSTARKPAPATPGTRHPRTMETREVAQGWPAQPRSQFDQHPHS PGEHRPSC\SPLPACPPRAWPKAGAVASATGTG\PQLPGSRKGQ KLPRTREPPPLLQAGWAVRKPPWEAKEGLGQAGRPSGMDSAS\ PQTGGGRGSLEWGLPLVLYLGPVHDVK*RSDRLG*PP*GGQGGGGH GAPSTPGPGEAW\LPQOTSRPKPGPQAY*GE\GSPGLQCPCS\ EL*RVPPGSLGPSTQCMYEPTDKS\GGADAAQLEVSTAGSRSTF QELKGPLDAGRLNPGAPSASSSH*GG*ERARAGAGHRGST*ASSKIEQGRPRPGPTSDALADVEGGA\GPHWPPLPGTLPNR/P GSPPPA*ASAGRKGTVSTLGGGL
5690	1424	58	PSPPAGVCAAEPAPLPLLALARDDRRCPSGAEAAPWQTGGPAID GAWRTSVSALRRGATC/APCSPGAEAAPWQTGGPAIDG\DGELP *VRSEEAPRGCGAECCGGPGSGPVRRPGAGRGAHAGQGRQDPEP DGLRHRQHGAASHARHRLQRRLRPGHHQNHRVRRDPQAPPGGPAP GHAAALPERTRGVAEPPAWAHAGSDAWRAGR*SORT*ERARPRH PTFQGRAGS\GQPGYQPPPNPHPGPSSPPAAP\GPRGA*GNPQLE KAPRSDRNP\SQGLRTRIRRPETPDCGPPSPAGSSASASTFRCTS SLSLLGP\PGAHNLDTAPQDR\HGP\CDKRGAPGVAGEDPRP* GNFVR*LLLMP/GVA\RHGTS\FLGPSSLGENCCQWDSGNLFGTP KG\SHPAFTKST\SMEEAKSYWNIPIR\DRGRQGVRINCLRVE SEMWGPYSA\PRPGTVFLSSFLSPASEEH\PEGSSSFNTPFP\PG PEGDPGLN\SPGLL
5691	107	550	ISNDPESFGYNIEQMAKRGKKLVELPYTVKGMDVSFSG\LSFIED VAHMLATGETCPTEDLCFCSLQVMQ\KTGTESWG*RFYIVEQN*S GDAPLIFSPYLSLTGNCGFAMLVITERAMAH\CGSPGGPSLWG GVGVYVLLLESVPLSYS
5692	1193	548	TQAWTRAEKDRKGVSRALRLHLERGPPT*RGSHPL\QSVPCIQK PSIFSSYPI\GLPQSGSGEPGPVGECQPVRRPQOPSCGPASRMPL TSRSVPPGRGALPPDSLSTRKGLPRTAGHRVRESGHKVPUVSQ RLNLPMVGMATRSNLQPPRKVAVPGPTR*RDQDSKQDFSSKPLQS VPGLASTQQTLTPADSGPGTGRRDATRAGLPVETMGNGVD
5693	1258	1330	ALTIVPVRKGTTWQAQPHGCSNLVSRARLDLSSRPSQNTE\QAP *QACPPSSLRPP\SRRR\APEWPKRATGSRCRGLSAPPWPWPAA RGE\PGSAPSHAP\PNSPRPSGTRHP\PGPSSRVLYSPSLPRNS PEAIIVWRSSRFPLRCCFWVSGFKDPNPVLRFF
5694	3	1338	GSKEPARSLHRRGSGHKSSAGKGWSVTLSTAGALG*KQLHQ\WT QRCL\NNLSE3E\NASSSLNSL\STPTASRRNSTIVLRTDSEKR SLAESGLSWFSESEKAPKKEYDGSGLKMEPGTSKWRERPERES CDDSSKGGEKKPISLGHPGSLKKGKTPPVAVTSPITHAQ SAL KVAGKPEGKATDKOKLAVKNTGLQRSSSDAGRDRLSDAKKPPSG IARPSTSGSGFYK\KPPATGTATVMTQGGSATLSKIQKSSGIPV

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			KPVNQRKTSLDVSNSAEPGFLAPGARSNIQYRSLPRAKSSMS VTGGRGGPPRVSSSIDPSLLSTKQGGLTPSRLKEPTKVASGRRT PTATKLAELPPTPLRATAKSFKVPPSLANLDKVNSNSLDLPPSS DTTQCI
5695	3	1338	GSKEPARSLHRRGGSGHKSSAGKGSVTLSTAGALG*KQLHQ*WT QRCL\NNLSSEEFNASSSLNSLPSTPTASRRNSTIVLRTDSEKR SLAESGLSWFSESEEKAPKKLEYDGSGLKMEPGTSKWRRERPES CDDSSKGGEKKFISLGHPGSILKKGKTPPVAVTSPITHAQASAL KVAGKPEGKATDKGKLAVKNITGLQRSSSDAGRDRLSDAKKPPSG IARPSTSGSGFYKPKPPATGTATVMQTGGSATLSKIQKSSGIPV KPVNQRKTSLDVSNSAEPGFLAPGARSNIQYRSLPRAKSSMS VTGGRGGPPRVSSSIDPSLLSTKQGGLTPSRLKEPTKVASGRRT PTATKLAELPPTPLRATAKSFKVPPSLANLDKVNSNSLDLPPSS DTTQCI
5696	3	1338	GSKEPARSLHRRGGSGHKSSAGKGSVTLSTAGALG*KQLHQ*WT QRCL\NNLSSEEFNASSSLNSLPSTPTASRRNSTIVLRTDSEKR SLAESGLSWFSESEEKAPKKLEYDGSGLKMEPGTSKWRRERPES CDDSSKGGEKKFISLGHPGSILKKGKTPPVAVTSPITHAQASAL KVAGKPEGKATDKGKLAVKNITGLQRSSSDAGRDRLSDAKKPPSG IARPSTSGSGFYKPKPPATGTATVMQTGGSATLSKIQKSSGIPV KPVNQRKTSLDVSNSAEPGFLAPGARSNIQYRSLPRAKSSMS VTGGRGGPPRVSSSIDPSLLSTKQGGLTPSRLKEPTKVASGRRT PTATKLAELPPTPLRATAKSFKVPPSLANLDKVNSNSLDLPPSS DTTQCI
5697	1147	47	PSEALSPPACPSAPAFRRSIISRLFGTSPATEAAPPPEPVPAAPQGPATVQSVEDFVPDDRLDRSFLEDITTPARDEKKVGAKAAQQDS DSDGEALGGNPVAGFQDDVDLEDQPRGSPPPLPAGPVPSQDITL SSEEEAEVAAPTKGPAPAQOCSEPETKWSSIPASKPRRGTAAPT RTAAPPWPCCGVSVRTGPKEKRSSTRPAPMEPGKGEQASSSESDP EGPPIIAQMLSFVMDDPDFESEGSDTQRRAADFPVRDPSDVTDE DEGPAEPPPPPPLPLPAFRLKNDSDLFGLGLEEAGPKESSEEGK EGKTPSKENKKKKKGKEEEEKAACKKSKHKKSKDKEEGKEERR RRQQRPPRSERTAA
5698	2	666	GAEAAEPOEDLPPLSQSSRFQQEQQKMNKSILGPVSFKDVAVDFT QEWWQQLDPEQKITYRDVMLENYSNLVSVGYHIIKPDVISKLEQ GEWPWIVEGEFLLQSYDEVWQTDLIERIQQEEENKPSRCTVFI ETLI*R/ERGNVPGNTFDVETNPVPSRKIAYTHSLCNSCER\GF NASSEYISSDGRYARMKADECSCCGCKSLLHIKLEKTHPGDQAYE FNQ
5699	2	1448	RVRQPPGLWVRRITVPMOCPPAGLRSRVPGVAG/DPSLPSFRGPRD EAAHRTIQTATARHTRKLYVQGPASGPPLPRVSTQVAI*DEKPLA RPS/GRTNAPFPQGQKPKGAAAPGPAAGRVAMR\PGHPGLLAS DSQRSSSKGSGWETPVWPS*AQPGWVSGLILLGDPSGPGS*RS TWLVGGARGPEGSGVRGSGWPGSCSDIGWALGNHS*HLDPNT WTQKWIQE\SPAPGEEG\VAPAPRGPTEAHGHCELTTEQSNN VPILFCNPSGALSRRTEPAGWVPTRHE*DGG*TAAPASGGAP VSTPTWAGTP\LNASLGPTDPQGKPGCRPPCALPKPAGPERSA* GGSLGCR/SMLPASSGPPAPGPPRLAAGHTSASARCPAAAA GWOPRREGFAGRAALPGPPHPSS*RELGGLGPGW*TLDPLPA HPAHPPGSAPPWGALGGWAAAARASLPWSPSLCLSFPAVTPVAGL FPPGRG
5700	923	597	NGHKGVWEINIY*RRSNIHKN3KSESHLNQDHSPPPPPTNSAREKLHSTGTAKNTGLEPLSGAPRQRAVFSGRTICOEFSSCLQCAYLD E*CSIASSKIALRVSVLSE
5701	59	410	IFEKICSDTQEFISPEINPQICSWLIFDKGAK/NHATGKDSEFN KWSWKNWLSLCR*MRPGPYFTPYTKINSK*IK/DANIRCETVKL LEENTGENLHDTCGLGNVFDMTPKTQPTKQK

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5702	3	1517	ETFVDPSCQCGGIFSDSPHPVITPSRASESSASSDGPHPVITPSRASESSASDGPHPVITPSRASESSA SSDGPHPVITPSRASESSASSDGPHPVITPSWPGSDVTLLAEALVITVN IEVINCSITEIETTSSIPGASDSDLIPTEGVKASSTDPPALP DSPEAKPHITEVITASAETLSTACTTESAAPHATVGTPLPTNSAT EREVTAPGATTLSGALTVTSRNPLEETSALSATVTPSYVKVSGAA PVSIEAGSAVGKITSFAGSSASSYSPSEALAKNFTPSETLTMDI TTKGPFPTSRDLPSPVPPTTNSRGNTINSTLAKITTSAKITMKP PTATPTTARTPRIT\A*VQVKEVSSSCG*VWLPRKTSLITPEWQ KG*CSSSTGNSTPTRLTSRSPYCVSGEANG/PSAAARHVPYAKR GCCP*PGPPPDTSCSVTQLRGQTQKVPKGSMSKPLTPDVATGPS LTSTGVYVWCGASPVPGRVLCLTLAHLVLCFSKEKT
5703	14	1117	HHKDSRSQCLPRTQECARPELRPLLCPRALWPVTRLSPYRCPWQA PKAGIGTKAKPSESHLKLHPGVPLSLDRQGEPATLGTGTCHCSDS RILRWHP**HTAAR**PRWRRRLPSSHWRWTRHLGVLRVQDKS**VSL DPSCRPRFLRTC**YGMRSVASSSNPPPGWSPGPGASVFPARPV ALPTGPRCW*APRGRTRQPCCGWPRLSSPHATADWGPGLPLSPSR GSWETAPGS*WCPWL*AARWIGWRTASGASAGLGRAADPSSAWA RRVAGLLPQGQLTVRR*H*TAGAPASVRSSQGATRSPFAPGGDQC ACGRGPGSC*HPPPWPVSPPSPVPCPSGR*HLRGPLLSAARPRA ACWPRHSPHDOTCPEP
5704	23	562	GDYEFDSPYWDDISQAAKDLVTRLMEVEQDORITAAEAI SHEWI SGNAASDKNIKGVCQAQIEKNFARAKWKVKA VRVTTLMKRLAPE QSSTAAAQSASATDTATPGAAAGGATAAAASGATSAPEGDAARAA KSDNVAPRRP*LPPQPQMVEVPPQPLMAVSPQPQPMEEASLQPLMG SPQP
5705	23	562	GDYEFDSPYWDDISQAAKDLVTRLMEVEQDORITAAEAI SHEWI SGNAASDKNIKGVCQAQIEKNFARAKWKVKA VRVTTLMKRLAPE QSSTAAAQSASATDTATPGAAAGGATAAAASGATSAPEGDAARAA KSDNVAPRRP*LPPQPQMVEVPPQPLMAVSPQPQPMEEASLQPLMG SPQP
5706	1161	610	QLCRFXAQDTVAIRKVKEVFGTCAMRHVVILFTHKD*GQALD DYVANTDNCSLKDVLRECERRYCAFNNWGSVEEQRQQQAELLAV IERLGREREGSFHSNDLFLDAQLLQRTGACACQEDYRQYQAKVE WQVEKHKQELRENESNWAYKALLRVKHLMLLYEIFVFLLLCSI LFFFIFLF
5707	28	609	GSPAPTPGFRRRPGRGTPSPGTRHHQGRAEPEPDAPERAPLRR* MFAIQPGIAEQQGQFLGDPPPLGCQPELQPDNSNSFMASAKDANE NWHGMPGRVEPILRSSSESPSDNQAFQAPGSPPEEGVRSPPEGA EIPGAEPKMGAGTVCSPLEDNGYASSSLSIDSRSSSPEPACG TPRGPGPPDPPLPSVAQA
5708	44	1925	SFSWEETISPCFPKMPAEPWWLSPVSLGAAGWPGQPRPYLDLPA QASVSRPHDRA*GEAVSLSLSSGDVCGHTDGGGAGSDPQAKPKP PRCPCTAMPSPRTKQVKRNKVCLLAIRYSIDPSDVSKAEP GPA GNPHDRSSTAA*LHRRAGAGSCLSLASLLPPSFSLGAPGAPSPL RVS PASGGRKEGRQGSGG*AGGGGP, ARI THADLPCVGFVCSPP LLK*SDSPVKQLPA\SGQGSGAGMPPVGSSDILRPRPTSVCSTG RAAG*CSWQPAACCTPRSQ*WA VARSPSRCRW*RQSGR*RG*S SRRRRGP*AA GRSTPAPB*PCS*GGAGRAYACRTGWGYAPSR* LEPSGPTSGSAL*TWASHSTGA*\SRLCGTAGTGPLCSQSSRS* AG*RCCTTAASPCCGSCSPHGPSPSACLHSWSGRTQPGPSA GRGRAMSRCVCTCTGLPCPGIPSLGASP GPGSGETGAGRSHTLK AARSRLSPRGSGSGRSY*SHNDNWGTWPAPPSPSAGHLLVGG*NS QRTSSDH*YTGTRRPWAGPGTRCSTAPSRAAPPVSRCRPPPPP PPRPPRLPAAAS/SGGAGSPAAASCSCSCRAPAKPASS/GEAPA PPRPEPEPPPPPARRP
5709	2	2031	ITLCPLPQTEKCLNVVTEATPLGIYLKARVEAGGLKELEISWG LHQINVRGAVVMRAGMGGCRCWGVMAPFAPR/NALSFLVNDCS LIHNNVCMMAAVFVDRAEGWKLGGLDYMSAOGNGGPPRKGIP

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			LEQYDPPPELADSSGRVVREKRSADMWRLGCLIWEVFNGPLPRAA ALRNPAGKIPKTLVPHYCELVGANPKVRPNPARFLQNCRAPGGFM SNRFVFTNLFLEETIQIKEPAEKQKFFQELSLSKSLDAFPEDFCRHK VLPQLLTAFEGNAGAVVLTPLFKVGKFLSAEEYQQKIIPIPVVK MFSTTDRAIRLLQQMEQFIQYLDEPTVNTQIFPHVVHGFLLDT NPAIREQTVKSMLLAPKLINEANLNVELMKHFARLQAKDEQGPI RCNTTVCLGKIGSYLSASTRHVLTSAFSRATRDPFAPSRRAGV LGFAATHNLYSMNDCAQKILPVLCGLTVDPEKSVRQAFKAIRS FLSKLESVSEDPTQLEEVEKDVAASSPGMGAAASWAGWAVTG VSSLTSKLIRSHSPPTTAPETENIPQRPTPEGVPAPAPTPVATPT TSGHWETQEEEDKTAEDSADRWDDEDWGSLEQEAEHSVIAQQD DWSTGGQVSRSQVS\TPTTNPPNPQSPGTGAAGK\RGLLGTLA GAKLPGATS\RYTAGQRV
5710	1	562	IPGSTISCEVELMARMMAKTIDSFTQNQTRLVVIIDGLDACEQCK VLQMLDTVRVLFSKGPFIAIFASDPHIKKAINQNLNSVPSGFK \LNGHDYMRNIVHLVPVFLNSRGL/RQ/LQENFS*LQQQMETFHA QILQGYRKMLTEEFHRTALGR*QNLVARQPSIDG*DAIGFELYV CIAIQFNTNKDDAT
5711	1526	1130	RRHPFWTTVTQEFASHHDDVAFTSTPVLFYFDSEAQPFTIVKSESS SQTAKAVLSQLRPSLFLHECAFHHFS*SLQRHTINLDQGIF*LLM LSEERQHFLFESS/IWITPHNLK/*FEIHEHLCGSHCHWTLLFFLL QIL
5712	3	1391	GRKLFQSLDISERLKFLTLDCVDDTLIVLAEEHGCLDIKELP ETVIDLNNKCLTFHPSKRPTPDELMDKFVSEVSPLYTPFTKPA SFLFSSSLRCADLTPEDISQLCKDINNDYLAERSIEEVYYLWL AGGDLKEELVNKEIIRSKPPICTLPNPLFEDGESFGQGRDRS/ TFR*YHWDIVVMPAKK*IERCWGRSILPITLKMTSLLPYNSN NELSAATAPLIIREKDTEYQLNRRIILFDRLLKAYPKKNQIWK EARVDIPPLMRGLTWAALLGVEGAIHYKDAIDKDTPIPTDRQI EVDPICRCHOYDELLSSPEGHAKFRRVLKAWVVSHPDLVYWQGLD SLCAPFLYLNFNNEALVYACMSAFIPKYLYNNFLKDNDHVQIYEY LTVFSQMIAPHDPPELSNLHNLEIGFIPDLYAIPWFMTMFTHVFP HKIFHLW\DTLLLGEFLFPILYWE
5713	634	284	PVCAPVDPWRWPVLPREDQEGQQL*AKLPRDFRR*FQILGPMEGH TACRCRSRGACVQHLPREDIRAAE*DPHLREVWPGLPTSSATSP *RAVLTSPCSHLSGASAASSHWLCCGVSFH
5714	212	613	WGLGLGPMTSSLGGGSQDAGGSSSSSTNGGGSGSSGPKAGAAD KSAVVAAPASVADDTPPERRNKGSIISEPLNKSLLRRSRPLS HYSSFGSSGGSGGGSMGGESADKATAAAAASLLANGHDLAA MA
5715	131	1979	ESASQQKRSKCLILTLKLELSGSAKPKTSARPSSLWLPHSQE QTTPASKLQGGGGGLGTGWGLHVPVTAASPLPRWCLFGAVAK\ GLPGP*LCPSGAA/GGLQRQGPGLSPLGAAGKVSCLHPPSMVENN DSTCHEHHEGILARAVTPVP\SCKPGRVLKPPGRVCRPPHPAAS PRPPGS/SDLDGPRPMHRLRAFPAAHGPVNTPHGEEKTFMSS QIRRKETKPL*RKTPAG\NNYQSNNSIPVSQSPQLTVDLLPSAGR TQAPSGRGDAGKPTPGHG\LPKAVSILTPNCPCSLAGGQ*PPGL YPKTPQRRWRRP/LLGPSQ*GSRQSTC*EV\GALGEPVRI PG L*PDLSCLISNGSXRREGLSFPRSLGPGRGPAGLQSLGCSPT PKNTACHSSGHVALQAGHDSARDVGSGHVALQAGHSTDQDVGRP VWRWIFLE*LGLSRETQGATRRLVWISPGRAAAACVACAQALE EGPLRLPGQDRAQPCSHCPGRAAGQPEPGAGAPCRF,/GG*DPT GLT/GVPGTDPKRGGRKPGQSGQETQGPTVWSGPESPLQPKD*E RQE/VGAGASSGVGLSRGRAGGPPSSAWEVAAMLLLRLHGSHSEL TDLTEAQTSQH
5716	1711	1370	RVFSLLCEGPGHCYQGAVCREACAAASPGLDSSAEPHRLCEHTD *LPK*GPGYIQHFHCDNSNILCILYNISFNLFYSF*GVARYAC* RCPFLVL*SGFFTIVGGYSCCMPLKT
5717	44	1489	LPTEALRESEWVSEYKGCGPGRGLVPEGESTSPLPSSVDTEDSLD EGPGALVLES DLLLGQDLEFEEEEEEEEDGNSDQLMGFERDSE

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			GDSLIGARPGLPYGLSDDESGGGRALSAESEVEEPARGPGCARGE RPQGPACQLCGGTGEGPGCCAGGGPGLPPRLLYSCRLLCTFV SHYSSHSLKRHMQTHSCEKPFRGRCRCPYASAQLVNILTRHTRHTG EKPYRCPHCPFACSSLGNLRRHQRTHAGPPTPCPTCGFRCCTP RPARPPSPTEQEAVPVRPEDALLLPDLSLHVPPGGASFLPDGQ \CGVKGRASAGLQDNHCOS /SLFPWTCRGCGOELEEGEGSRLG AAMCGRCMRGEAGGGASGQPQPSDKGFACSLCPFATHYPNHLA RHMKTHSGEKPFRCARCPYASAHLNDLNKRHQRVHTGKPYKCPL CPYACGNLNLKRHGRIHSQDKPFRCSLCNYSQNQSMNLIRHM
5718	120	284	VAHALSLPLAESYGNDSMTHFQLPPTQLAWDLCRTCLPLSYNFT S**STADPLHL
5719	48	428	ELNNGPFPQMLCNNGNLAVTGSWADRSPHLHEAASQGRLLALRTL LSQGVNVNAVTLDHVTPHLHEACLDGHVACARTLLEACANVNNAIT IDGVTPLFNACSQGSPSCAELLEYGAKAQP\ESCLPSP
5720	1	1051	LOAFRNASEVPVMVLVGTQDAISAA\NPRVYRRTSRARKLSTDLK \RCT\YYE\TCGGTYGLQMWSVSFQDVACKVVAL\RKKQQ\LAI GPCK\SLPN\SPSH\SAVSAASIPARAPINQHE\SGGGSAFSD Y\SSSVPSTPSISQRELRIETIAASSTPTPIRKQSJKRSNIFTS RKGADP\DREKKAAGCKVDSIGSSGRAPIKQGILLKRSGKSLNK EWKKKYVTLCDNGLLTYHPSLHDYMQNIHGKEIDLRLRTTVKVPG KRLPRATPATAPGTSPRANGLVERSNTQLGGGTGAPHASSAS LHSERPLSSSSAWAGPRLPEGLHQRSCSVSSADQWEATISLPPGM QHPASG
5721	97	492	RHSSPCCSLRRTERSNSAAVST/TTVQQFKRFIENYRRHIGCVA VFYIAIAGGLFLERAYYYAFAAHHTGIFTTRVGIIILSRGTAAASI SFMFSYILLTMCRNLITFLRETFLNRYVVFDAAVDFHRLIASTA
5722	88	1043	VALDVLAGSSPGGGMAGALLGPRVHGIRAVLRVARGGVQAPGAP GSLGVSHAAAPPARPGCGAAQSPHRGRRHGGGAGLPPRSPRFP QESVPASTSTARPGRRVSRRLPQHPGPRGRRRPGAGVGAPRR GRARGQAGLLGRQGQGGRGAERERAALQARRGRRPGPEPDQSCG GRPRAAAAPGRAPADPOPPAPRPAPADPVRRPADAPAPAPAPA PPPPHLGALTAGSGEERQSQPRAEFLRLRGRAPLP\PRAERGG RPKQAEQQQ\PKRPTPPARGPQSSGDPAMLPCQRAGLRTGGLAGT KSSTREIPEMI
5723	88	1043	VALDVLAGSSPGGGMAGALLGPRVHGIRAVLRVARGGVQAPGAP GSLGVSHAAAPPARPGCGAAQSPHRGRRHGGGAGLPPRSPRFP QESVPASTSTARPGRRVSRRLPQHPGPRGRRRPGAGVGAPRR GRARGQAGLLGRQGQGGRGAERERAALQARRGRRPGPEPDQSCG GRPRAAAAPGRAPADPOPPAPRPAPADPVRRPADAPAPAPAPA PPPPHLGALTAGSGEERQSQPRAEFLRLRGRAPLP\PRAERGG RPKQAEQQQ\PKRPTPPARGPQSSGDPAMLPCQRAGLRTGGLAGT KSSTREIPEMI
5724	3	1841	FTNEAPPAPLPDASASPLSPHRRAKSLSDRRSTEPSVTPDLINFK KGWLTKQYEDGQWKHHWFALADSLRYYRDSVAEEAADLGDGID LSACYDVTEYPVQRNYGFQIHTKEGEFTLSAMTSGIRRNWIQTIMKHVHPTTAPDVTSLLPQEKKNKSCSFETCPRPTEBKQEAELGEPDPEQKRSRARE\RRREGRSKTFDWAERFPIQOQALAQERVGVGVP ADTH\DPWRPEAHGELELERERARRREERRKRFGMLDATDGPGTE DAALRMEDVDRSPGLPMSDLKTHNVHVEIEQRWHQVETTPLEEK QVPIAVPHLSSEDGGDRLSTHELTSLLKELEQSQKEASDILEQ NRLLQDQLRVALGREQSAREGYVLQATCERGEFAAMEETHQKKIE DLQRQHRELEKLREKDRLLAEBATAATISIAEAMKNAHREEME RELEKSQRSQISSVNSDVEALRROYLEELQSVPRELEVLSBQYS QKCLENAHLAQALEAERQALRQCQRENQELNAHNQELNNRLAAE ITRLRLLTGDDGGGEATGSPLAQGKDAYELEVPSGARPCLTQLC TOEPQGSAAWPLSYRVVGGTDLRQEQSGPGRSKSPEGGEEQ
5725	3	1049	VNGHSEETSQSPNRTEPHSDSCVLDGISKSTEDLSPQKSGPVG SVVKSHSITNMIEIGGLKIYDILSDN\DLSSHLQPLK/FTSAVDG KNIVRSKAATLLYDQPLQVFTGSSSSSDLISGTTKAIFKFDSNHN PE/GAKYNKRPHKWAHNHLHKYMLHSIISNTVAV\RSQRHFVA

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			LOTKSPNRPQCFSSSAPS/VDCRAQ/INQSYAKHSANMNFNSNH NVRANTAYHLHQRLGPARHGEWMAISPNDRLIPAVTRSTIQRQS SVSSTASVNLGDPGSTRRAQIPLSYFREHSAAGRTPPMMPG SQRPLSARTYSIDGPNASRPQSARPSINEIPERTMSVSDFNYSR TSP
5726	2	486	SRSLSMWWNSGLPASSHSSKLPVTVGFSCCVKRLRLHGRLPLGA TRMAGVTPCILGPLLEAGLFFPGSGGVITL/ESVGAGIPGPSRAG QGSPGGSGEGPLSSPSQPLPADLPGATLPDVGLLELEVRPLAVT GLIFHLGQARTTPYLQLQVTEKVQVLLRADDG
5727	21	221	RPIILKETRRLPWATGYAEVINAGKSTHNEDQASCEVLTVKKK AGAVTSTPNRNSSKRRSSLNPNG
5728	2	877	GTRNGQFEPRRGRAWEWSAGGLRAPGAAAGGPGVQPRGSG/LPG NAIRAGVNPGRGPASPFWDSLWLPWLWPPPTDHAPGAPDFPAVE GRV/PWAGGRPPWDVSGVLGSRVCGPLYSTSPAGPG/SGGLSPSQ GGPAGAGGDAG/LPGRCPSAPWRAGSRPAASCPCDWPICPGPQGLWL HRNPTS/GPPSQIGEQAEGQDEGVADAPQIQCKN/GAEDPPAED EPPQVPEAGEEDAVPAEEGPQGTTPETQADQVQRERPEAHLEAGGA KGSPRRLADPQDLPAGOMSLAPFPPTPVAAVIRSNK
5729	1	1525	AGGAREVLTQLIGHFAGFGVGAHHWNQQDAALGRATDSKEPPGEL CPDVLYRTGRTLHGQETYTPRPLILMDLKGSSLKEEGGLYRDK QLDAAIAWQGKLUTTHKEELYPKNPYLDQDFLSEAEGVLSSDGWWRV KSIPNGKGSSPLPTATTPKPLIPTEASIRVSDFLRVHLHPRSI CMIQKYNHDGEARLLEAFGQGESVILKEPKYQBELEDRHLHYVEE CDYLGQFQILCILHDGFGSGVGAKEALLQDEYSGRGIITWGSLGLR GPYHRGEAQRNIYRLLNNTAFLGLVHLLTAHSSLVCPQLSGGSILGR PEPPVFSFPYLHYDATLPFHCSAILATALDTVTCS/YRLCSSPVS MVHL\ADMLSFCGKKVVUTAGAIIFFPLAPGQSLPDSLMQFGGAT PWTPLSACGEPSGTRCFQAQSUVLRGIDRACTSQLTPGTTPPSA LHACTTGEELAQQYLOQQQPGVMSSSHLLTPCRVAPPYPHLF SCSPPGMVLGDSPKGAEVESPVFNG
5730	1258	1713	KKFQAPARETCVECQKTVPMERLLANQQVFHISCFRCSYCCKNN LSLGTYASLHGRUYCKPHFNQLFKSKGNYDECFGHRPHKDWT KIEEGFWERPRNFENQGRPLKSPGGEDCPSC**GGCPGSNY*AQ GSSREKGGQASWNPKLRVA
5731	122	443	RSHRGELIPKDCSYMRKPPRPKRROG/CALPQGCLTFKDVAI EFSLEEVKCLNPAQRALYRAVMLENYRNLESVGLTSKDSWYMRK KPGRRGKQRQQEWFFLRKY
5732	226	772	PPSRSCQSPRRKSRRRAHTVTLVCGFTSFSFLPLYLCLRF PERTCSQLOQADWAPDFGPPSFVPSWGATATGARKFLIAFNI\N LLGTKEQAHRIALNLREQGRKDQPGPRLKKVQGIGWYLDEKNLA QVSTNLLDFEVTLHTVYEECTCREAQELSLPVGSQQLVGLVPLK ALLDAA
5733	1	460	PALQEVDANALAWGKQYENDARTLFEFTSGVNNTESPIIYRDES MRTACSPDGLCDGNGLELKCPFTSRDFMKFRLGGFEAIKSAYM AQVQYSMWVTRKNAWYFANYDPRMKREGLHYVVIERDEKYM\AS FDEI\VP\EFIGKMDEVLSRDPM
5734	3	968	RCNSPESLTSLLVLLTTANNLFLVLPAYSKNRAYAIFIVFTVI GSLFLMNLLTIAIYISQFRGYLMKSLQTSLEFRRRLGTRAFEVLS SMVGEGGAFFQAVGVKPQNLLQVQLKVQQLDSSHQKAMMEKVRSY GSVLLSAEEFQKLNELDRSVKEHPPRPEYQSPFQLOSAQFLFG HYYFDYLGNLIALANLVSIICVFLVLDADVLPFAERDDFJLNC VFIVYYLLEMLLKVFALGLRGYLSYPSNVEDGLLTVVLLWLEIS TL\VCTDCHTQAGGRRWW/RLLSLWDMTRMLNMLIVFRLRIIP SMKPMMAVVAESTVGLG
5735	2	540	FFTPVCVARAFNFDPQATVKKAAYSLPVGGGTSCGLPQARRISL ATPRQLYK/SSNMTQRWQREISNFYELMFLNTIAGRITYNDLNQ YPVFPWVLTNYESEELDLTLPGNFRDLSKPFIGALNPKRAVFYAE RYETWEDDQSPPYHYNTHYSTATSTLSLWLVRIVSIFIACLWY LKILT
5736	1	382	GTRPSTKKSGYSPQQVAIHKGHQKENTAVAHNSNQKADSAQV

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			TARLSVTTPPNLLETVSFPQPDLFDNPVYSTTTEKLASDLRANKNQES*ILPDGSIIPIP*T*TSYIQLSTTHLRRAKLPQLLRR
5737	290	1041	KACHLHLSFLTSNFLFNPLPDSLYSVEAR8QRANLGPCRRKR LQTLMRLAAGFQYSSHKDPSLSAKEKHTDYHNEARGPWPWGVG* RTADGSCGRGPDPGAHHPGPKSSSWRASRLLPGLGGSHHLDAYVG RD\ECGTPAPLQLEIPPQPRGHPPAPIPTGQAGPRDSGPGASP*V ETRPLTDGRR*PGVRPVGWTPTAHPGATLRRPRAVEPSVSACGKW APSPTSQGCCGRCDAVPKHRAWRTPLCSQ
5738	8	460	DTLSSLNCTLPTLPMTPSF*LSFL*FPGLARAKSIPTKTYSNEV VTLWYRPPDILLGSTDYSTQIDMW*GQVEVWQGPGCGKGGLVTT ATQPAAFLFTVPSLPRGVGCIFYEMATGRPLFPGSTVEEQLHFI FRILSEEAWALCAVETHR
5739	1	1222	SFQRGIRWNVHTLPHPRAVWAGIGRGHGS*ALLGRARAPALC FPTLELFLESPLDPLPALRAMGLHLWAAGPPTHPAGISDLAAEV SAEVDPGPVPGYLSSPQSTIDTCIYIFTSGTGLPKAAIRSHIKI LQCQGFYQLCGVHQEDVIYLALPLYHMSGSLLGIVGCMGIGATV VLKSFKSAGQFWEDCQQHRVTVFQYIGELCRYLVNQPPSKAERG HKVRLAVGSGLRPDTWERFVRRFGPLQVLETYGLTEGNVATINY TGQRGAVGRASWLYKHIFPFSLIRYDVTGEPPIRDQGHCMAITS PGEPEGLLVAQVSOQSPFLGYAGCPPELAQGKLLKDVFPRPGVFFN TRDLLVCDQGFLRFHDRTGDPFRWKGENVATTEVAEVPEALDF LQEVNVYGVTV
5740	265	231	PAYWLKVFTLCLESKTDLREKASHVSAQLQGEVRGLAGALWM*A VYVERVYN*MSRMVHEALEQKRPAGLSSMALQLNPCLGMLMA LQSELHKLYDEETQSWSGSACCGYP
5741	1	650	PRKTMRRGVLMTLLQQSAMTLPWIGKPGDRPPPLCGAIPASGD YVARPGDKVAARVKAVDGEQWILAEVSYSHATNKYEVDIDIDE EGKERHTLSSRRRVIPLPQWPKANPRTDPEALFQKEOLVLALYPQT TCPYRALIHAPPQRPQDDYSVLFEDTSYADGYSPPLNVAQRYVV ACKEPKKK*CRLADSPSPNDTGQDSRGRACIKHIPLKKK
5742	2	362	TQSVEIKEKRNPNVNLTQDGNTALMTASKEGHTEIVQDLLDAG TYVNIPDRSGDTVLIGAVRGGHVEIVRALLQKYADIDIRGQDNK TALYWaveKGNATMVRDILQCNPDTEICIKDG
5743	2	415	GKTPPEGIDATEEEIEIDLEETERETISPQENGLEEVKPLGEMQTDL KATGREISPREKTPPEVIDATEEEIDKDLLEETGRREISPEENGPEE VKPVDEMETDLKTGREGSSREKTREVIDAEEVIEDLEETERETE ISPQE
5744	3	703	TRRTTTTSPITTRQMTTPAALPTVTTTPDLTGTPLOMTTIA VFTTANTCLSLTPSTLPBEATGLLTPEPSKEGPILTAESETVLP SDSSSSAESTSADTVLLTSKESKVWDLPLSTS HVSMWKTSDVSS PQPGASD TAVPEQNKTTKGTQMDGIPMSMKNEMPISQLMMIAP SLGFVLFALFVAFLLRGKLMETYCSQKHTRLDYIGDSKNVLDV QHGREDEDGLFTL
5745	1400	599	GKSRFVNLMKHSKTYDSFQDELEDYIKVQKARGLEPKTCFRKM KGDYLETGCGYKGEVNSRPTYRMFDQRLPSETIQTYPYPRSCNI PQT VENRLPQWLPAHDSRRLDLSYCFTRDCFSEKPVPLNFNQQE YICGSHGVEHRVYKHFSSDNSTSTHQASHKQIHQKRKRHPEEGR EKSEEERSKHKRKKSCEEIDLHKHSIQRKKTEVEIETVHVSTE KLKNRKEKKS RDVVS KKEERKRTKKKEQGQERTEEMLWDQSI LGF
5746	3	821	SFASGRLLTPSSPAFDGELDLQRYNSNGPAVSAWSLGMGAVWSSES RAGERRFPCPVCGKFRFNSTILALHRLTHQPERPRSPAARLLLE LEERALREARLGRARSSGGM QATPATEGLARPQAPSSAFCRCP YCKGKFRTS AERERHHLHILHPRWKCGLCSFGSSQBEELLHHS LT AHGAPERPLAATS AAPPQPPQPPPQPEPRSVQPEPEPQPER EATPTAPAAPPEEEPPAPPEFRCQVCQGSFTQSFLKGHMRKHKA SFDHACPV
5747	2	1328	DRHVETLCIHFLGPSTGSTAKTGRNWLTGNCNYGNTCRFVHG PSPRKGYSSNYRRSPERPTGDLRERIKNKRDVDTEPQKRNT ESSSPVRKESSRGRHREKEDIKITKERTPESEEEENVEWETNRDD

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			SDNGDINYDVHESLEMKRKQTQRELMKLEQENMEKREETIIKK KEVSPVVRSKLSPLSPSLRKSSKSPKRKSPPKSSASKDKRTS AVSSPLLDQQQRNSKTNQSKKKGPRTPSPPPPPIPEDIAGKKYKE KYKVKDRIEKKTRDGKDRGRDFERQR3KRDKPRSTSPAGQHSP ISSRHISSSSQSGSSIQRHSPSPRKRKTPSPSYORTLITPPLRRS ASPYPSHSLSSPKQSPSPRHSRSPMREKGRHDHERTSQSHDRRH ERREDTRGKRDREKDSREEREYEQDQSSSRDHRDDREPRDGRDR RE
5748	934	473	SEGPQVFYKGLAPTLIAIFPYAGLQFSCYSSLKHLKYKWAIPAEG KKNENLNQNLLCGSGAGVISKTLTYPLDLFKKRLQVGCFEHARA FGQVRRYKGIMDCAKQVLQKEGALGFFKGLSPSLLKAALSTGFM FFSYEFCNVFHCMNRATASQR
5749	552	1	GFPVDPRVRGSTLSLAERPKGMRSGSFRDPTDDVHGVSVLAS SASSTYSSAEFRMQSEQITRKLRRELESSQEKVATLTSQLSANAN LVAAFEQSVLNVMTSRLRHLAETAEEKDTELLDLRETIDFLKKNN SEAQAVITQGALNASETTPKELRIRKRNSSDSISSLNSITSHSSSI GSSKDADA
5750	22	866	IFISICLWNAHLCFLLPKDCIDQVVKLQNLFVDDSGRYLAIQF IILEWAYVFLYYYEYRKAQDQLDTAKDISQLQIDLTGALKRTRF QENYVAQLILDVREGDVLNSCEFTPARTPOBHLTKNLELNDT ILNDIKLADCBQFQMPDLCAEBIAIILGICNTNFQKNNPVHTLDE VELLAFTSCLLSQPKFWAIQTSALJLRTKLEKGSTRVERAMRQ TQALADQFEDKTTSVLERLKIFYCCQVPPHWAIQRQLASLLFEL GCTSALQIFEKLEMWE
5751	3	751	SCGSALRAWRCGAALATFPAPALPGMLYRALYAFRSAEPNALA FAAGETFLVLERSSAHWWLALARARSGETGYVPPAYLRRLQGLEQ DVLQAIDRAIEAVHINTAMRDGGKYSLEQRGVLQKLIIHRKETLS RRGPSASSVAVMTSTSSTDHLLAAAARQPNGVCRAGFERQHSLP SSEHLGADGLFQIPLPSSQI?PQPRRAAPTPPPPVKRDREA LMASGSGHHNTMPGGNSVSSGSSVSSCI
5752	3	471	GFPVGVLVAWAGPWRGPVHSVGGGRAALHGAELPCLSGAAT VEREMLRHKNEMLRVETEARAKAERENADIIREQIRLKASE HRQTVLESIRTAGTLFGEGRFRAFVTDRDKVTATVNIFIKQGWQV AERQHV GASWSRSCPCLCTAL
5753	34	483	DDSXAIPGGVQAPFGAVRNIYTPTGHRIRKLDQIQSGGNVYAG GQEAFKKLNLYLDIGEIKKRPMEVVNTEVKPVIIHSRINVSARFRK PLQEPCTIFIQLANGDLINEASRLLIPRKTLNQWDHVQLQMVTKEI TLRSGAVHRLYTLEGRLV
5754	14	331	TLVHVEFAGEHAEAIASREQEVLQGWKELLSACEDARLHVSST ADALRFHSQVRDLIISWMGDIASQIGAADKPRCPSSLGLPASPW WPTPATPSPLTAPFSME
5755	3	888	LGDQFYKEAIEHCRSYNSRLCAERSVRLPFLDSQTGVAQNNCYI WMEKRHRGPGLAPGQLTYTPARCWRKKRRLHPPDPKLRILLEIK PEVPLKKDGFESTEALLRLGEGVKEKKVDAREEEESTQRIQ RVLENDENVEEGNEEDEDIPIPKRKNRTRGRARGSAGGRHH AASQEDHDKPYVCDICGKRYKNRPGLSYHYAHTHLASEEGDEAQ DQETRSPNHRNENHRPQKGPQDGTVIPNNYCDFCLGGSNMNKKS GRPEELVSCADCGRSAHLGGEGRKKEKEAAA
5756	3	621	SSKLQALFAHPFLYNVPEEPPLLGAEDSLLASQEALRYYRRKVAR WNRRHCKMYREQMNITSLDPPLQLRLEASWVQFHLGINRHGLVSR SSPVVSKLLQDMRHFPTISADYSQDEKALLGACDCTQIVKPSGV HLKLVLRFSDFGKAMFKPMRQQRDEETPVDFYFIDFQRHNAB AAFLHLDRILDFRRVPPTVGRIVNVTKIEL
5757	3	473	YKDALLLPDNHRQVFENGTLKLTDVQKGMDEGEYLCSVLIQPO LSISQSVHVAVKVPPLIQPFEFPPIASIGQLLYIPCVVSSGDMPI RITWKRDGQVIISGSVTIESKEFMSSLQISSVSLKHNGNYTCI ASNAATATVSRSRQLIVRVPPRFV
5758	1	474	FRRGAGAERGEHREGERGAAGMGEFKVHVRVRFNYVPSGIRCV YNNQSNRLAVSRTDGTVEIYNLSANYFQEKFPPGHESRATEALC WAECQRLFSAGLNGEIMEYDLQALNIKYANDAFGGPIWSMAASP

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			SGSQLLVGCGEDGSVKLFQITPKDIPV
5759	2	1240	GNAAFAGQQGVVYETFHMSDLPYYTTNGTVHVVNNQIGFTTDPR MARSSPYPTDVARVVAAPIFHVNVADDPEAVIYVCSVAEWRTNF NKDVGADLVCYRRRGHNEMDEPMFTQPLMYKQIHRQVPVLKKYA DKLIAEGTWTQLEFEEEIAKYDRICEEAYGRSKDKKILHIKHWL DSPWPQPFNVDGEPKSMTCPATGIPEDMLTHIGSVASSVLEDF KHTGLSRILRGRADMTKNRTWDALAEYMAFGSSLKEGIHVRL NGQDVERGTFSRHHVHLHDQEVDRRTCVPMNHLWPDQAPYTCVN SSLSEYGVLGFELGYAMASPNALVLWEAQFGDFHNTAQCIDQF ISTGQAKWVRHNGIVLLLPHGMEGMGPEHSSARPERFLQMSNDD SDAYPAFTKDFEVSQL
5760	1	1221	VRDTSDELSSLSWTVPEGQFDHFVQFKNGDQPKAVRVPGHED GVTISGLEPDHKYKMNLYGFHGQQRGVGPVSAVGLTAPGKDEEMA PASTEPPTPEPIPKRLEELTVDATPDSLSSWTVPEGQFDHF LVQYKNGDGQPKATRVPGHEDRVTISGLEPDNKYKMNLYGFHGG QRVGPVSAIGVTAEEERETPTPTEPSMEAPEPPEPPEPLIGELTVIC SSPDSLSSLSWTPQGRFDSFTVQYKDRDGRPQVVRVGGESEVT VGGLEPGRKYKMHLYGLHEGRVGPVSTVGVTAQVEDVDETPSP TEPGTEAPEPPPEPLLGELETVGSSPDSSLSSWTVQGRFDSFT VQYKDRDGRQAVRVGGQESKVTVRGLPGRKYKMHLYGLHEGR RLGPVSAIGVT
5761	3	1275	SCDMAEAAAALVWIRGPGFGCKAVRCASGRCTVRDFIHRHCQDN VPVENFFVKCNGALINTSDTVQHGAVYSLEPRLCGKGFFGSM RALGAQIEKTTNRACRDLGSRRLRDVNHEKAMAEEWKQQAERE AEKEQKRLERLQRKLVEPKHCFSTDYQQQCHEMARELLEDSVLK GMQAASSKMSVSAEILSENRKROWPTSQTDRGASAGKRCFWLGM EGLETAEGSNSESDDDSBEEAPSTSAGMFHAPKIGSNGVEMAACK FPSGSQRARVVNTDHGSPEQLQIPVTDGSRHILEDSCAELGESK EHMECSRMIETEETQEKKAESKEPIEEEPTGAGLNKDKEETERT DGERVAEVAPEERENVAVAKLQESQPGNAVIDKETIDLLAFTSV AELELLGLEKLKCELMALGLKCGGTLQ
5762	2	344	GSTGGTPLHSQGGGGGGGRRTPRGMPKEYEPPDPRRMYTI MSSEEAAANGKKSWARELIESGKVRSLASLWSLTHLTALHLSDN SLSRJPSDIAKLHNLYVLDLSSNKIR
5763	3	429	LDKDTGLIMLIARLDYELIQRFTLTIARDGGEETTGRVRIINV LDVNNDNVPFTQKDAVXGALRENEPSVTQLVRLRATDEDSPPNQ ITYSIVSASAFCGSYFDISLYEGYGVISVRPLDYEQISNGLIYTVMANDAGN
5764	19	441	VCARACGEMRQLLRPIDRQRYDENEDLSDVEEIVSVRGFSLEBK LRSQLYQGDFVHAMBKGDFNYEYVOREALRVPVIFREKDGJGKMPDPDFTVRDVKLLVGSRRLVDMVDNTQKGTEMSMSQFVRYYE TPEAQRDKL
5765	3	825	QKILRLNNNSHOPPTSSNSKDCGGPASSGAGATAALADGLKFA SVQASAFQGNSHKETSKSKVURSKTSKDANKSLPSAALYGIPEIS STGKROEVQGGRPBATGMNSALGQSNSGGSGNPNSNSTSTS AATAGAGSCGKSKEEKPGKSQSSRGAKRDKDAGSKRKDKHDLQ GHQNQSGSQAPSGGHLYGFCAKSNGGGASPFFCGGTGSVAAA GEVSKSAPDSGMLCNMSMLVKKEEEEESHRRIKKLKTEKVDPFL TVPAPPPHV
5766	1608	663	SGLFSVDPASSQAMELSDVTLIEGVGNEMVWAGVVVLILALVL AWLSTYVADSGSNQLLGAIIVSAGDTSVLHLGHVDHLVAGQGNPE PTLELPHPSSEGNDKEAAEAGEGRGDSTGEAGAGGGVEPSLEHLLD IQGLPKRQAGAGSSSPEAPLRSEDSTCLPPSPGLITVRLKFLND TEELAVARPEDTGVALKSKYFPQESQMKLHYQGRLLQDPARTL RSLNITDNCVIHCHRSPPGSAVPGPSASLAPSATEPPSLGVNVG SLMVFVFLVLLGVVWYFRINYRQFFTAPATVSLVGVTVFFSFLV FGMYGR
5767	2	892	NPRATPRPPTRELRGTETVILWYLDWRALMKRKRKMKANIKLVG SGFPLPSSDLDSSLTEEIDEKIGFRNDANEWDWNVADFRDAGGS LTEVKVEEEERDPQSPBEIEEEEMLSSVIPDSRRENELPDFP

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			HIDEFFTLNSTPSRSAYDEPHLLVNIEKQKLEKRRLDIEAERLQVEKERLQIEKERLRLHDMERHLQLEKERLQIEREKRLQLQIVNSEKPSLENELGQCEKSMLQPQDIETEKLKLERERLQLEKDRLQFLKFESEKEKLQIEKERLQVEKDRLLRQKEGHILQ
5768	3	476	SSRSLVSVSPPPGIVELGPFFAWECSRLGSAVTQRAGPAAMAVKDYPFYLTVKRANCSLELPASSPAKDAEFSNKRVKPLSRVTSLANLIPPKATPLKRFSQLTQRSISFRSESRPDILAPRWSRNAAPSSTKRRDSKLWSETFDVC
5769	38	667	TKTKKGVKEKATDQSVAFAEHCPELQYVGFMGCSVTSKGVILHTKLRLNLSLDRHITELDNETAMEIVKRCKNLISLNLCLNWIINDRCVEVIAKEGQNLIKELYLVSCSKITDYALIAIGRYSMTIETVDVGCCKEITDQGATLIAQSSKSLRYLGLMRCDKVNEVTVEQLVQQYPHITFSTVLQDCRKTLERAYQMGWTPNMSAASS
5770	1	484	DSRRYDVKTRKWSFLLEEHSKLIAKVRCLPQVQDPLPTLTAFA SQLKKTSLSLTPDVPEADLSEBVDPKLVSNLMPFQRAGVNFAIAKGGRLLLADDMGLGKTIQACIAAFYRKEWPLLVVVPSSVRFTWEQAFLRWLPSLSPDCINVVVTKDRLLTA
5771	168	741	GLLPSACIARARSWREASEGPSSRACSNGSQDTFEACYSGTSTPSFHGSCHSGSDHSSLGLEQLQDYMVTLRSKLGPLEIQQFAMILREYFLGLPLTQDYCTGLLKLYGDRRKFLLLGMRPFIDQDIGYFBGFLEGVGIREGGILTDSFGRIKRSMSTSASAVRSYDGAQRPEAQAFHRLLADITHDIE
5772	148	383	EFLNALVSPSHPQIKAEDDQPLPGVLLSLSGGLFRSNLLTDNGILTFSNLVTCASIYHLPVFPEREPGCSMRDLRVA
5773	2	723	PRVRSKHNFCFMEMNTNLQVEHPVTEMITGTDLIVEWQLRRIAAGEKIPLSQEEITLQGHAFEARIYAEDPSNNFMPVAGPLVHLSTPRA DPSTRIETGVRCQDEVSVHYDPMIAKLVVVAADQAAALTKLRYSLRQYNIVGHLHTNDFLNLNSGHPEFEAGNVHTDFIPQHHKQILLSRKAAAKESLCQAAALGLILKEKAMTDTFTLQAHQDFSPFSSSGRRLNISYTRNMTLKDGGNSK
5774	2	592	FVEEENIRVRCGGSELNFRRAVFSADSKYIFCVSGDFVKVYSTVTEECVHILHGHRNLVTGJQLNPNHHQLYSCSLDGTIKLWDYIDGILIKTFIVGCKLHALFTLAQAEEDSVFVIVNKEKPDIFQLVSVKLPKSSSQEVEAKELSFVLDYINQSPKCIAFGNEGTVVAVREFYLSVYFFFKKETTSRVTLSSS
5775	3	538	SSGCCDPAFPSSLAEAAATMPVSKCPKKSES LWKGWDRKAQRNGLRSQVYAVNGDYVGEWKDNVKHGKGTQVWKKGAIYEGDWKFGKRDGYGTLSLPDQQTGKCRVYSGWWKGDKKSGYGIQFFGKEYYEGDWCGSQRSGWGRMYYNSNGDIYEQWENDKPNCEGMLRLSQNP RP
5776	2	484	RLPQDCVCQNLSESLGTLCPSKG LLVMFVPPDIDRRRTVELRLLGNFIIHISRQDFANMTGLVDTLTSRNTISHIQPFSFLDLESLSLHLDSNRLPSLGEDTTLRGLVNLQHLIVNNNQLGGIADEAFEDFLTLTDLDSLQYNNLHGPAGVGLRGDAWQPSSTS
5777	2	949	GQDPPEPGQDLFQPEREVDPESWGRGREPRLGKLRFQNDHLSVLQVKKLEALKDGSAGLDPQLPGTCYSPHCPPDKAEAGSTLPENLGGGSEVSRVHPSDLEGREPTPELVEDRKGSRRPWDRSLENVYRGSEGSPTKPFINPLPKPRTFTKHAGEGDKGKPGIGFRKEKRNLPLPSLPPPPLSSPPPSVNRRLWTGRQKSSADHRKSYEFEDLLQSSSESSRVWDYATKGLTRTLSEENVYEDILDPPMKENPYEDIELHGRCLGKCVLNFPASPTSSIPDTLKQSLSKPAFFRQNSERNV
5778	1	1210	QRRQSVSRLLLPVFLLEPPAEPGLEPPPEEEGGEPAGVAEEPGSGGPCWNLQLEEVPGPGPLGGGPGRLSPSSYSSDELSPGEPLTSPPWAPLGAPERPEHLLNVRLERLAGCATRDSAASDILLDDIVLTHSLFLPTEKFLOQELHQYFVRAGGMEGPEGLGRKQACIAMLHFLDTYQGLLQEEEGAGHIIKDLYLLIMKDESILYQGLREDTLLRHOLVETVELKIPENQPSKQVKPLFRHFRRIDSCQTRVAFRGSDEFICRVYMPDHSYVTIRSRLSASVQDILGSVTEKLQYSEEPAGREDSLILVAVSSSGEKVLLQPTEDCVFTALGINSHFACTRDSYEALV

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			PLPEEIQVSPGDTEIHRVEPEDVANHLTAFHWELFLRCVHELEFV DYVFHGE
5779	138	1671	EAVQVLKHSADVNDARNDKWNQTPLHVAAAANKAKVKAECVITPLLS SVNVSDRGGRALHHAALNGHVEMVNLLLAKGANINAFLDKKDRR ALHWAAYMGHLDDVVALLINHGAEVTCDDKKGYTPLHAAASNGQI NVVKHLLNLGVIEIDEINVYGNATALHIACYNGQDAVVNLIDYGA NVNQPNNNGFTPLHFAAASHTGALCSELLVNNGADVNIQSKDGG SPLHEMTAVHGGRFTRSQTLIQNGGEIDCVKDGTPLHVAARYGH ELLKYSIVSLSNEHVLISAGFEIDTPDFGRTCLHAAAGGNVECI KLLQSSGADFHKDKCGRTPLHYAAANCHFHCTELVTGAVNV ETDDWGRITALHYAAASDMDRNKTILGNAHDNSEELERARELKEK EATLCLEFLLQNDANFSIRDEKEGYNSIHYAAAYGHRQCILLELLE RTNSGFEESDSGATKSPLHLAVSEMP
5780	154	624	QFRVITCLPFKGPDYRLYKSEPELTTVAEVDESNGEEKSEPV SIEITSVVKGSHFPTPGVGVPPRAKSPTPESSTIASYVTLRKTKMM DLRTTERPRSAVEQLCLAESTRPRMTVEEQMERIRRHCQAACLREK KKGLNVIGASDQSPLQSPSPNLRDNP
5781	19	941	RGLGGHPWRPPMRAASQGCLPVSFTVGPHQERAYGGGRGPGGAF PAFFVSGTCPDILYIAPTPPEKAEGGSQKNHQPPPGERAHRDGE QAPCRAGPTRKVAVAPRPPSCP*GPE\PGEEPRPLDRSPPLGQ VQPHFTSQDAKSAEDEAPSRLGKHQPRSAQVGSRLLDALQGPKT OHSHHTVTCKS\PROKEDRSPKPKQAPKHPPEHGRQS\QAPPPLP VAPSRTCGGC+TWDPALLVSP\PGDSTPELPA\QOPTGGPSR CRQALPPQG+RQQPRQRPR/PTGASRSHPAKAGCQGPPIKIRNY NTMD
5782	5176	1237	DRSMSMSMAADSYTDTSYTDTYTEAYMVPPLPPEEPPTMPPLPPEE PPMPPPLPPEEP\PECPALPTEQSALTAENTWPTEVPSLSEESV SQFPPPVQSSEI\SEPSAVPTDVSASDPSVLVSEAAVTVPPEPP PEPESSITLTPEVSAVVAEEHEVVERPVTMSETPAMSAAEPT VLASEPPVMSETAETFDSMRASGHVASEVTSLLPVAVTTPVLA ESILEPPAMAAPESSAMAVLESSAVTVLESSTVTVLESSTVTVL EPSVVTVPPEPPVVAEVDYVITPPVVALEPSVPVLEPAVSVLQ PSMIVSEPSVSVQESTVTVSEPAVTVSEQTQVPEVATEIESTPM ILESSIMSSHVMKGINLSSGDQNLAPEIGMQUEIALHSGEPEHAE EHLKGDFYESEHGINIDLNINHHHLIAKEMEHNTVCAAGTSPVGE IGEEKILPTSETKQRTVLDTYPGVSEADAGETLSSTGPFALEPD ATG\TSKGIEFFTASTLSLVNKYDVDSLTTQDTEHDMLLISTSP SGGSEADIECPLPAKDIIILDLPSNINLVSSDTNEPLPVKR'DQ TLAALI\SLKESSGGEKEVPPPS\REKLPDSGSFANSANEDINEAD LVRPVSSPRTWNVLPSRAGLI\EGP\LLASDFGPVQNLYSSPVV \SSMP\ERASGS\SSGEKGG\YEIFVKVLDKTHEKSKKNNRDKGE EKEKKRDSSLRSRSKRSKSSEHKSRLTSESSRSRARKRSSKSKS HRS\QTRSRSRS\RDERRRRSSRSRSKSRGRRSVSKEKRKRSPKH RSKSREKRKRSSRDNKRTVARSRTPSRSRSKTPSRRRRSR SVGRRRSFSISPSRRSRTPSRSRSRTPSRSRTPSRSRTPSRS RTPSRRSRTPSRRRSRVSRRRSFSISPVRLRRSRTPSRRRFS RSPIRRKRSSRSERGRSPKRITDLDKAQLLIEAKANAAMCAKA GVPPLPPNLKPAPPPTIEEKVAKKSGGATIEELTEKCKQIAQSKE DDDVIVNPKPHVSDEEEEPEPFYHHPFKLSEPKPIFFNLNIAAK PTPPKS\QVILTKEFPVSSGSQLRKKEADSVDVYGEWVVPVEKNGEEN KDDDNVFSSNLPS\SEPVDI\STAMSERALAQKRLSENADLEAMSM LNRAQERIDAWAQOLNSIPGQFTGSTGVQLTQEQLANTGAQAWI KKDFQFLRAAPVTGGMGAFLMRKGWRESEGGLGKNEGNKEPILV DFKTDRKGLVAVGERAQKRSGNFSAAKMDLSGKHPVPSALMEICN KRRWQPPEFLLVHDSPGDPHRKHFRLFRVYLING SAYQPNCMFFI.NR Y
5783	1693	698	DSSLRVAFTMEGISNFKTPSKLSEKKSVLCSPTTINI\PASP\PM QKLGFGTGVNVYLMKRS\PRGLSHSPWAVKKINPICNDHYRSVYQ KRLMDEAKILKSLHHPNIVGYRAFTEANDGSLCLAMEYGEKSL NDLIIE\PI*SQ\PKILFOQP\LLIKVALNMARGLKYLHOEKKL

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			LHGDISNNVVVIKDFETIKICDVGVSPLDENMTVTDPPEACYI GTEPWPKPEAVEENGVITDKADIFAGLTLWEMMTLSIPHINLS NDDDEDKTFDESDFDDEAYYAALGTRPPINMEELDESYQKVIE LFSVCTNEDPKDRPSAAHIVEALETDV
5784	2669	1388	PRVRPRVRTDHNYYISRIYGPSDSASRDLWVNIDQMEKDKVKIH GILSNTHRQAARAVNLSPDFPFYGHFLREITVATGGFIYTGEV VH RMLTATQYIAPLMANFDPSPSRNSTVRYFDNGTALVVQWDHVHL QDNYNLGSFTFQATLLMDGRIIFGYKEIPVVLVTQISSTNHPVKV GLSDAFVVVHRIQQIPNVNRRRTIYEYHRVELQMSKITNISAVEM TPLPTCLQFNRCGPVCVSSQIGFNCWSCKLQRCSGFDRHQDW VDSCGPEESKEKMCENTEPVET\ FLEPPQP*ERQPPSSGS*LPP E/DAVTSQFPSTSPLTEDDTKIALHLKDNGASTDDSAAEKKGTL HAGLIVGILILVLIVATAILVTVYMYHHPTSAASIFFIERRPSR WPAMKFRRGSGHPAYAEVEPVGEKEGFIIVSEQC
5785	2669	1388	PRVRPRVRTDHNYYISRIYGPSDSASRDLWVNIDQMEKDKVKIH GILSNTHRQAARAVNLSPDFPFYGHFLREITVATGGFIYTGEV VH RMLTATQYIAPLMANFDPSPSRNSTVRYFDNGTALVVQWDHVHL QDNYNLGSFTFQATLLMDGRIIFGYKEIPVVLVTQISSTNHPVKV GLSDAFVVVHRIQQIPNVNRRRTIYEYHRVELQMSKITNISAVEM TPLPTCLQFNRCGPVCVSSQIGFNCWSCKLQRCSGFDRHQDW VDSCGPEESKEKMCENTEPVET\ FLEPPQP*ERQPPSSGS*LPP E/DAVTSQFPSTSPLTEDDTKIALHLKDNGASTDDSAAEKKGTL HAGLIVGILILVLIVATAILVTVYMYHHPTSAASIFFIERRPSR WPAMKFRRGSGHPAYAEVEPVGEKEGFIIVSEQC
5786	2532	1674	SYKLPAAERRASSCSQPPPTPIRRWPAPGRTSRGHRPQM*SGTP APPRPARSTVSPASPLPKPRAGRCGSRRPSACSTRPC*SLN*M S**H*KRNLQRSSSMSRRLPSCARPHR**RQLTVAA RLPTWA K SPPLACSFQCQQAKSQSQLSSGRSTR*PERMSFRP\SFPGNPAIP SLAPPSSRP/PKGRPQCTWIPSRWPASPTAPPTTT*APTSSPGST GRSMMTCPTRWTATPWSARASSRPRNWP*WRPSGRLSTV*RA TGGSTATAPPKRPFRNWNPMMAE
5787	2	1460	MASAATVSLADEVNCP\ICQGLTKAEAGSLSNCG/HKNFCRACL T\RYCEIP\GPD\LEESP\TCP\LCKEPFRP\GSFRPNWQLANV VENIERLQLVSTLGLGEEDVCOEHGEKYFFCEDDEMOLCVVCR EAGEHATHTMRFLEDAA\APYREQIHKCLKCLIKEREELQEIQS RENKRMQVLLTQVSTKRQQVISEFAHLRKFLEEQQSILLAQLES QDGDLRQRDEF DLLVAGEICRFSALIEELEEKNERPARELLTD IRSTLIRCTRKCRKPVAVSPLGQRIRDFFQQALPLQREMKM F LEKLCFELDYEPAHISLDPQTSHPKLLEDHQAQFSYKWQNS PDNPQRFDRATCVLAHTGITGRRHTWVVSIDLAHGGSCTVGVV S EDVQRKGELRLRPEEGVWAVRLAWGFV SALGSFP\TRLTLKEQP RQVRVSLDYEVGWVFTNAVTRPEIYFTASFTRKVIPFFGLWG RGSSFLSS
5788	2	6860	EHSVSGRSSAYGDATAECHPAGPGSVSSSTGAISTTIGHHQEGDG SEGEGEGETEGDVHTSNRLHMVRIMLLERLLQTLPQLRN VGGVR AIPYMOVILMLTTDLDGEDEKDKGALDNLLSQLTAELGMDDKDV SKKNERSALNEVHLVVMRLLSVFMSRTKSGSKSS\CESSSLISS ATAAALLSSGAVDYLCHLVLKSLEYWKSQQNDEEPVATSQ LLKP HTTSSPPDMSPFFLQRQYVKGHAADVPEAYTQLLTEMVLR LPYQI KKITTDTNSRIPPVFDHSWFYFLSEYLMIQQT P FVRRQVRKLL FICGSKEKYRQLRDLH TLDS\HVRGJIKKLLEEQGIFL RASV VTA SPQSZALQYDTLISLMEHLKACAEIAAQRTINWKFCIKDDSVLY FLLQVSFLVDEGVSPVLLQLLSACCGSKVRLAASSGSSSS SSPAPVAASSGQATTQS KSSTKSKKEKEKEKDGETSGS QEDQ LCTAIVNQLNKFADKETL IQFLRCFLLESNSSSVRWQAHCL LH IYRNSSKSOOELL LDMWSIWPPELPAYGRKAAQFV DLLGYFSLK TPQTEKKLKEYSQA V EILRTQHNILTHPNNSN IYNTL SGLVEF DGYYL ESDPCLV CNNPEVPFCYIKLSSIKV DTRYTTTQ QVVKLI GSHTISKVTVKIGDLKRTK MVRTINLYYNNRTVQAIVELK NKPA RWHKAKVQLTPGQTEVKIDLPLPIVASNLMIEFADFYENYQAS TETLQCP RCSASV PANPGVCGNCNGENVYQCHKCRSINYDEKDPF

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			LCNACGFCKYARFFMLYAKPCCAVDPIENEDRKKAVSNINTL LDKADRVYHQLMGHRPQLENLLCKVNEAAPEKPKQDDSGTAGGIS STSASVNRYILQLAQEYCGDCKNSFDELSKIIQKVFAKRKELLE YDLQREAAATKSRTSVQPTFTASQYRALSVLGCGHTSSTKCYG CASAVTEHCITLRLATNPALRHILVSQGLIRELFDYNLRRGA AAMREEVRQLMCILTRDNPEATQQMNDLIIGKVSTALKGHWANP DLASSLQYEMLLLTDISKEDSWELRLRCALSLFLMAVNTKTP VVENITLMLRILQKLICKPPAPTSKKNKDVPPVEALTTVKPYCN EIHAQAQLWLKRPKASYDAWKKCLPIRGIDGNGKAPSKESELRH LYLTERKYVWRWKQFLSRRGKRTSPSDLKLGHNNWLRQVLFTPAT QAAROOACTIVEALATIPSRKQVLDLLTSYDELSSIAGECAA YLALYQKLITSAHWKVYLAARGVLPVGVLITKEIARLLALEEEA TLSTDLQQGYALKSLTGLLSSFEVESIKRHKFSRLVGTVLNGY LCLRKLVVQRTKLIDETQDMILEMLEDMTTCSETKAFMAVC ETAKRKNLDDYRTPVIFERLCSIYYPEENEVTEFFVTLEKDPO QEDFLQGRMPGNPYPSSNEPGIGPLMRDIKNKICQDCDLVALLED DSGMELLVNNKIIISLDLPAEVYKKVWCCTTNEGEPMRIVYRMRG LLGDATEBIESLDSTTDEEEEVYKMGAVMAQCQGGLCMLN LAGIRDFKQGRHLLTVLLKLFYCVKVKVNQQLVKLEMNTLN VMLGTLNLALVAEQQESKDSCGAAVAEQVLSIMEI\IQAEPNVEP LSEDKGNNLLLTGDKDQLVMLLDQINSTFVRSPNSVLCGLRIIP YLSFGEVEKMQIILVERFKPYCNFDKYDEDHSGDDKVFL\DCFCK IAAGIK\NNSNGHQL\KDI\ILQKGITONALD\YMKKHIP/SAA RIWDADI\WKSFCLRPALPFILRLLRGLAIQHPGTQVLIGTDSI PNLHKLEQVS\SDEGIGTLA\ENL\LESLREHPDVNKIDA\AR RETRAEKKRMMAMMRQKALGTLG\MTTNEKGQVVD\IRTALEA DWEELIEEP\GLTCCICREGYKFQPTKVLGIYTFTKRVLVGGVW ENKPRETSRATSTVSHFNIVHYDC\HLA\AVSLARGREEWESAA LQNANTKCNGLPPWGPHVPESAFACTLARHNTY\QCTGQREP TYQLNITHDIKLLFLRFAMEQSFSADTGGGGRESNIHLIPIYI GLYVLNTTRATSREEKNLQGFLEQPKEKWVESADEVDPYYFTV LALHILPPEQWRATRVEILLRRLLVTSQARAVAPGGATRLTDKAV KDYSAYRSSLLFWALVDIYNMFKKVPTSNTEGGWCSLAEYIR HNDMPIYEAADKALKTFQEEMFPVETFSEFLDVAGLSEITDPE SFLKDLLNSVP
5789	1	2407	LPLHAVEKTGRGPQQPALKMPGKLLRSAGLESDTAMKKGETLRKQ TEEKEKKEPKSDKTEEIAEEEETVFPKAKQVKKKAEPSEVDMN SPSKSKKAKK\KEEPSONDISPKTKSLRKKEPIEKVVSSKTKK VTKNEEPSEEEIDAPPKKKMKEEMNGETREKSPKLKNGFPHP EPDCNPSEAASEESNSEIEQEIEPVQKEG\AFSNFPISEETIKL LKGRGVTFLFPIQAKTPHEVYSGKDIAQARTGTGKTFSFIAPI TEKLHG\ELQDRKRGRAFPQLVILAPTRELANQSKDFSDITKKL SVACFYGGTPYGGQFERMRNGIDILVGTGRIKDHIQNGKLDLT KLNHVVLDEVQMDGFPADQVVEILSVAYKKDSEDNPQTLLFS ATCPHWVFNVAKKYMNSTYEQVDLIGKKTQKTAITVHEHLAICH WTQRAAVIGDVIRVYSGHQGRITIIFCETKKEAQLSONSAIKQD AQSLHGDIPQKQREITLKGFRNGSGFGLVATNVAARGLDIPBVD LVIQSSPPKDVESYIHRSGRTGRAGRTGVCICFYQHKEEYQLVO VEQKAGIKFKRIGVPSATEIJKASKDAIRLLSDVPPTAISHFK QSAEKLIEEKGAVEALAALAHISGATSVDQRSLINSNVGFVTM ILOCSCIEMPNISYAWKELKEOLGEIIDSKVKGMLVFLKGKLGVC DVPTASVTEIQEKGWHDSSRRWQLSVAEQPELEGPRREGYGGFRGQ REGSRGFRGQRDGNNRRFRGQREGSRGPRGQRSGGGNNKSNRSQN GQKRFSKAFGQ
5790	3786	1585	ARRQRDPQLAI.RRNQELKQQVDSLSESQLEAEPNKRQHITY QRCIQLKQAI DENKNALQKLSKADESAPVANYNQRKEEEHTLLD KLTQQLQGLAVTISRENITEVGAPTEEEESESEDSEDSGGEEE DAEEEEEEKEENESHKWSTGEYIYAVGDFTAQQVGDLTFKGEI LLVIEKKPDGWIAKDAKGNEGLVPRTYLEPYSEEQESSEE GSEEDVAVDETADGAEVK\QRTDPHWSAVQKAISEAGIFCLVN HVSFCYLIIVLMRNRMETVEDTNGSETGFRAWNQSRGRIFLVSK

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			PVLQQINTVDLTTMGAIPAGFRPSTLSQLBEGNQFRANYFLQPELMPSQLAFRDLMWDATEGTRRSRPSRISLILTLWSCKMTPLPGMSTIQVLSRHVRCLCFDGNKVLNSNIHTVRATWQPKKPKTWTFSPOVTRILPCCLLDGCFIRSNSASPDLGLFELGISYIRNSTGERGELSAGWVFLKLFDASGVPIPAKTYEFLNGGTPYEKGIEVEDSISSRAHGSVFYQIMTMRRQPLVLLKRLSNSRNVLSSLIETLIGMCISIHLLIFYRQILGDVLLKDRMSLQSTDLISHPMLATFPMLLEQPDVMDALRSSWAGQES\TIKRSEKR\PK3FLKVPRLVYH\GCVLPLL/HTPTRLPPFRWAAEETETARWKVITDFLKQNQENQGALQALLSPDGVHEPFDLSEQTYDFLGEMRKNAV
5791	3	1636	LRVAEFAAGTSR\IGAGLIQPLHRAPARDHGLLRGGAAPALSVSHGN\GKQL\AMSSCGSDDEQIKRENIRSLTMMSGHVGFESELFDQLVNRSIQQQFCFNILCVRGETGIGKSTLIDTFLFTNFEDYESSHFCPNVKLKAQTYELQESNVQLKLTIVNTVGFGDQINKEESYQ\PIVDYIDAQFEAYLQEEELKIKRSLSPTYHDSRIHVCLYFISPTGHSLKTL DLLTMKNLDSKVYIIIPVIKADTVSKTELQFKIKLMSLVSNGVQIYQFPTDDDTIAKVNAAAMNGQLPFAVVGSMDEVKVGNMVKARQYPWGVVQVENENHCDFVKLREMLICTNMDLREQTHTRHYELYRCKLEEMGFTDVGPNKPVSQETYEAKRHEFHGERQRKEEMKOMFVQRVKEKEAILKEARELQAKFEHLKRLHQEERMKLEEKRRLLEEEIIIAFSKKKATSEIFHSQSFLATGSNLRKDDKRKNSQFFVKQKVPEHRRSSSQANFIKKLEVCFDFAV\CFITSIFGEOPQLLIFMEKYFOVQGQYIQSQE
5792	2263	653	AAAAPSPAWWCGVFVVYVHTCWVMYGIVYTRPCSGDASICQPYLARRPKLQI\RHSFTTTRSHLGAEENNIDLVLNVEDFDVESKFERTVNVSVPKKTRNNGTLYAYIFLHHAGVLPWHDGKQVHLVSPLTYYMPKPEEINLLTGESDTQOIEADKKPTSALDEPVSHWRPRLALNVMDNFVFDGSSLPAADVHRYMKMIQLGKTVHYLPILFIDQLSNRVKDMVVINRSTTEPLTVSYDKVSLGRLRFWIHMQDAVYSLQQFGFSEKDADEVKGIFVDTNLYFLALTFFVAFHLLEFFLAFKNDISFWKKKSMIGMSTKAVLWRCFSTVVIFLFLDEQTSLLVLPAGVGAIAIELWKVKALKMTIFWRGLMPEFQFGTYSESERKTEEYDTQAMKYLISYLLYPLCVCVGAVYSLLNICKSWYSLINSFNGVYAFGFLFMLPQLFVNYYKLKSVAHLPWKAFTYKAFNTFIDDVFAFIITMPTSHRLACFRDDVVFLVYLYQRWLWYDVKRRVNEFGESYEKATRAPHTD
5793	2263	653	AAAAPSPAWWCGVFVVYVHTCWVMYGIVYTRPCSGDASICQPYLARRPKLQI\RHSFTTTRSHLGAEENNIDLVLNVEDFDVESKFERTVNVSVPKKTRNNGTLYAYIFLHHAGVLPWHDGKQVHLVSPLTYYMPKPEEINLLTGESDTQOIEADKKPTSALDEPVSHWRPRLALNVMDNFVFDGSSLPAADVHRYMKMIQLGKTVHYLPILFIDQLSNRVKDMVVINRSTTEPLTVSYDKVSLGRLRFWIHMQDAVYSLQQFGFSEKDADEVKGIFVDTNLYFLALTFFVAFHLLEFFLAFKNDISFWKKKSMIGMSTKAVLWRCFSTVVIFLFLDEQTSLLVLPAGVGAIAIELWKVKALKMTIFWRGLMPEFQFGTYSESERKTEEYDTQAMKYLISYLLYPLCVCVGAVYSLLNICKSWYSLINSFNGVYAFGFLFMLPQLFVNYYKLKSVAHLPWKAFTYKAFNTFIDDVFAFIITMPTSHRLACFRDDVVFLVYLYQRWLWYDVKRRVNEFGESYEKATRAPHTD
5794	1	5016	MGPRLSVWLLPAAALLHEEHSRAAKGGCAGSGCGKCDCHGVKGQKGKGERGLPGLQGVIGFPGMQGPQGPGPQKGDGTGEPGLPGTKGTRGPPGASGYGNPGNGLPGIPGQDGPPGPCTPGCNGTKGRGPLGPPGLPGFAGNPGPGLPGMKGDPGEILGHVPGMLLKGERRFPGIPCTPGPPGLGLQGPVGPPGFTGPPGPPGPGEKGQMGLSFQGPKGDKGDQGVSCPPGVPGQAOQVQEKGCDPATKGEKGQKGEPGFQGMPGVGEKGEPKGPKPGPKGDKGDKGEGKSPGFPGEPEGYPGLIGRQGP\QGEKGEAGPPGPQPGIVIGTGPLGEKGERYGPGTPGPRGEPPGPKGFPGLPQGPGLPVPVGQAGAPGFPGERGEKGDRGFPGSTLPGPSPGRDGLPGPPGSPGPPGQPGTYNGIVECQPGPQGDQGPPGIPGPQPGFFIGEIGEKQGKGESCLICIDGYRGPPGPQGPGEIGFPGPQGPAGKCDRGLPGRDGVAGVPGPQCTPGLIGQPGAK

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			GEPGEFYFDLRLKGDKGDPCFFCQPGMPGRAGSPGRDGHPLPGPKGSPGSVGLKGERGPPGGVCPGSRGDTGPPGPPGVGPAGPIGDKGQAGFPCCPGSPCLPGPKGEPKIVPLPGPPGAELPGPSGFPGPQGDRGFPGTGPR\PG\ PGEKGAVG\QPGIGFPGPPGPKGV DGLPGDMGPGTGPGRPGFNGLPGNPGVQGQKGEPGVGLPGLKGLPGLPGIPGTPGEKGSIGVPGVPGPEHGAIGPPGLQGIRGEPEPPGLPGSGVSPGVPVGIGPPGARGPGQGQGPPGLSGPPGIKGEKGFPF PGFLDMPGKGDKGQAQGLPGCITGQSGLPGLPGQQGAPCIPGFPG SKGEMGVGMGTPQPGSPGWAPGLPGEKGD\HGFPSSGPRGD PGLKGDKGDVGLPGKFGSMKDVKYMGSMKGQKGDQGEKGQIGPIGEKGSRGDGTGPGVPGKDGQAGQPGQPGPKDPGPGISGTPGAPGLP GPKGSVGGMGLPGTPGEKGVPGIPGPGQSPGGLPGDKGAKGEKGQ AGPPGIGIPGLRGEKGDQGIAFGPGSPGEKGEKGSIGIPGMPGS PGLKGSPGSVGVPGSPGGLPGEKGDKGKGLPGLDGIIPGVKEAGLPG TPGPTGPAGQKGEPGSDCIPGSAGEKEGEPGLPGRGPPGPGAKGDKGSKGEVGFPGLAGSPGIPGSKGEQGFMGPPGPGQPGPGLCSP GHATEGPKGDRGPQGQPGPLPGLPGMGPPGLPGIDGVKGDKGNP GWPGAPGVPGPKDGPQGMPGIGGSPGITGSKGDMGPPGVPGF QGPKGLPGLQCIGKDQGDQGVPGAKGLPGPPGPPGPYDIIKGEP GLPGPEGPGPLKGQLQGLPGPKGQOQGVTLVCGTPGPGPQIPGFDGA PGQKEMGPAGPTGPGRGPPGPPGPDGLPGSMGPPGTPSVDHGFL VTRHSQTIDDPQCPGSGTKILYHGSLLYVQGNERAHGQDLGTAG SCLRIKFSTMPFLFCNINNNVCNFASRNDYSYWLSTPEPMPSMAP ITGENIRPFISRCAVCEAPAMVMAVHSQTIQIPPCPSGWSLLWIGYSFVUMHTSAGAEGSGQALASPSCLEEFRSAFFIECHGRGTCNYYANAYSFWLATIERTSERMFKKPPTSTLKAGELRTHVSRCQVCMRT
5795	1192	61	STRSPTVEYISAHPHILFMLLKGYEAPQIALRCGIMLRECIRHEPLAKIILFSNQFRDFFKYVELSTFDIASDAFATFKDLLTRHKVLVADFLIONYDTIFEDYBKLLQSENIVVTKRQSLKLLGELILDHRNFAIMTKYISKPENLKLMMNLLRDKSPNIQFEAFHVFKVFVASPHKTQPIVEILLKNQPKLIEFLSSFKQERTTDQFADEKNYLIQKIRDLKTTAP*RALRDSDKR
5796	2	1078	GRVGWELWCMYISPPKDWWWDAGDPSLPIRTPAMIGCSFVVMRKFFGEIGLLDPGMDVYGGENIELGIKVWLCGGSMEVLPCSRVAHIERKKKEYNSNIGFYTKRNALRVAEVWMDDYKSHVIIAWNLPLENP GIDIGDVSEERRALRKSLLCKCKNFQWYLDHVYPREMRYNNNTVAYCELRNNKAKDVCLDQGPNTAILYPCHGWPQDARYTKEGLFLHLAGLTTLLPDTDLVDNSKSRLQLLDCDKVKSSLYKRWNFIQNCAIMNKGTGRCLEVENRGLAGIDLILRSCTQRWTIKNSIK*R EGAGALEPGPQDMAAPPNIWTSCPGGETARGRQVLDGPPRASPGQHRDPG
5797	2	891	PRVRQKTLVDVTLENSNIKDOQIRNLQQTYESASMDKLREKQRQLEVAQVNEQKLMKVVESSQEANABVREMTPKLYSQYEELQEEQRKHSAEKEALLEETNSFLKAIEFRANKMMAEISLEEKDQRIELDRLTIERMEKERHQQLQQLLEHTEMSEGLTDSKERYQOLEEASASLRERIRHLNDMVHCQQKKVKQMVEEIESLKKKLQQQKLILQ LLEKISFLBGENNELQSRLDYLTEQAKTEVETREIGVGCDLLPSQTGRTRTIVMPSRNTPYTRVLELTMKKTLT
5798	644	115	KILGRWRKSMSNQEKQPYYEECARLSKIHLEKYPNYKYKPRPKRTCIVDGKKLRLIGEYKQLMRSRRQEMRQFTVQGQGPQIPITTGTVVYVPGAITMATTTPSPQMTSDCSSTSASPEPSLPVIQSTYGMKT DGGSLAGNEMINGEDEMEMYDDYEDDPXSDYSSNEAPEAVSAN
5799	2679	1435	LLSTYIKFINLFPETKATIQGVLRAGSQLRNADVELQORAVEYLTLSVASTDVLATVLEEMPPFPERESSILAKLKRKKPGAGSALLDGRDPSSNDINGGMEPTPSTVTPSPSADLGLRAAPPPAAPPASAGAGNLLVDVFDGPAAPQSLGPTPEEAFLSPGPEDIGPIP EADEBLLNKFVCKNNQFLNQLIQLQIVGVKSEFRQNLGRMFLFYGNKTSVQFQNFSPTVVHPGDLQTQLAVQTKRVAAQVDGGAQVQQLV NIECLRDFTLTPPLLSVRFRYGGAPQALTLKLPTVINKFFQPTEMAAQDFQFRWKQLSLPQQEAQKIFKANHPMDAEVTAKLLGFGSA

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			LLDNVDNPNPENFVGAGIIQTKALQVGCLLRLEPNAQAQMYRLTLRTSKEPVSRHLCELLAQKF
5800	2679	1435	LLSTYIKFNLFFETKATIQGVLRAGSQLRNADVELOORAVEYL TLSSVASTDVLATVLEEMPPFPERESSILAK\KRKKGPAGSAL DDGRRDPSSNDINGGMEPTPSTVSPSPSAD\JGLRAAP\PPAAP PASAGAGNPNLVDGPAAQPSLGPTEPEEAF\SPGPEDIGPPIP EADELNNKFKVCKNNVGLFENQLQIGVKSEFRQNLGRMVLFYGN KTSVQFQNFSPTVWPGDQLTQLAQTKRVAACQVDGGAQVQQVL NIECLRDFLT\PLLSVSRFRYGGAPQALTLKLPTINKFFQPTEM AAQDFFQRWKQLSLPQQEAQKIFKANHPMDAEVTKA\LLGFGSA LLDNVDPNPENFVGAGIIQTKALQVGCLLRLEPNAQAQMYRLTLRTSKEPVSRHLCELLAQKF
5801	3	1413	FPRLYHLIPDGTEITSIKINRVDPSESLSIRLVGGSETPLVHIII QHYIRDGVIARDGRLLPGDII\LKVN\GMDISNVPHNYAVRLLRQP CQVLWLTVMRE\QFRSRNNNGQAPDAYRPRDDSFHVILNKSSPEE QLG\IKLVRKVDEFGV\IFNVLDGGVAYRHGOLLEENDRVLATNGH DLRYGSPESAAHLI\QASERRVHVVSRQVRQSPDIFQEA\GWN SNGWS\PGP\GERSNTPKPLHPTITC\HEKVUNI\QKDPG\BESLGM\TVA GGASHREWDLPIVYVISVEPGGVISRDGRIKGTD\I\LLN\DV\GELT EVSRSEAVALLKRTSSSTV\KALEVKEYEPQEDC\SSPAALDSNH NMAPP\SDWSP\SVWMWLELP\RCIYNCKDIVLRRNTAGSLGF\IVG GYEE\NGNKP\FFIKSIVEGTF\AYNDGRIRCGDILLAVNGRSTSG MIHA\CLARLLKELKGRITLTIVSWPGTFL
5802	3	290	CFSLYQIMERIMDLPTLLRHA\REMFSVGGLFW\WMFRIRIILCLM GAFFYLISPLDFV\PEALFG\I\LGFLDDFFVIF\LLIYI\SMYREV ITQRLTR
5803	2234	1299	EAQFGTTAEIYAYREEQDFGIEIIVKVK\AIGRQRFK\LELRTQSD GIOOAKVQ\LLPECVLP\STM\SAVQLES\LNKCC\FPSKP\VS\REDQC SYKWQKYQKRKFHCANLT\SWP\WL\YSLYDAETLM\DR\KKQLRE WDENLKDDSLPSN\PIDFSYRVAACLPIDDV\RI\Q\LLKIGSAIQR LRCELDIMNKCTSLCC\KQCOETEITTKNEI\FSL\SLCG\MA\AYVN PHGYVHETLT\TVYKAC\NLN\LG\RP\STEH\SWF\PGYANTVA\QCKICA SHIGWKFTATKKDMSPQKFWGL\TRS\ALLFT\IP\DEDEIS\PD\KVI\LCI
5804	2	1707	EMEKQRQEEQKRTEEERKRR\LEQDM\LEKRK\I\QRELAKRAEQIE DINNTGTESASEEGDD\SLITVVPVKS\YKTSGKM\KKN\PEDLEKE REEKERIKYEE\DKR\I\RYEEQ\PSL\KEAK\CL\SLV\MD\TE\SEAKK ESL\PGK\KL\LT\FEELER\Q\RENR\KKQ\AEE\EAR\K\REEE\KRAFEE ARQM\VN\NEDEENQ\DTAKI\FKG\YR\PGK\KL\LS\FEEMER\QR\REDEKR KAEEE\EAR\RI\EE\KK\AFAE\ARR\NM\VV\DD\SP\EMY\KT\ISQ\EF\LT\PGK\LE\IN\FEELL\KQ\ME\EE\K\RT\TE\ER\K\H\K\LE\ME\K\Q\EF\Q\LR\Q\EM GEEE\EN\ET\FG\LS\RE\YE\EL\K\RS\GS\I\Q\AK\NL\K\SK\FE\K\G\Q\LS E\K\E\I\Q\K\K\B\EE\RA\RR\RA\ID\LE\I\K\RE\A\EN\FH\EE\DD\DV\RP\ARK\KS\ E\AP\FT\K\VN\MK\AR\FE\Q\MA\K\AR\EE\EE\Q\RR\I\EE\Q\KL\LR\Q\PE\Q\RE\I DA\AL\Q\K\RE\EE\EE\EG\SI\NG\ST\A\EE\EE\Q\TR\SG\AP\W\K\PL\K\NT SV\U\DS\SEP\VR\FT\K\VT\G\EP\K\PE\I\T\W\W\F\G\E\I\L\Q\D\G\E\DY\Q\Y\I\ER\GE TY\CL\Y\LP\T\F\PD\G\G\E\Y\MC\A\VN\N\K\G\SA\ST\CI\LT\I\ES\K\N
5805	3	776	YISDTLGQVYKSKIRWWIEENGNGNISVDD\LI\AL\LD\IA\HASS AFKESQQQ\SE\DR\YEV\K\ER\LY\PK\SK\RR\Y\DT\Y\NI\AG\Y\Q\G\I\EV\GL YT\Q\I\Q\OL\I\PP\FD\N\K\N\K\SL\K\Y\VN\VF\G\SS\DI\PG\DP\N\NEY\K\LA LKN\Y\I\PL\T\K\K\SL\K\K\SS\DF\FF\DEY\VF\LL\K\PR\NN\I\K\Q\N\EE\AK\TR RK\VA\G\Y\FK\K\Y\VD\I\FC\LL\EE\Q\N\NT\GL\G\SK\F\SE\PL\Q\VER\CR\RN\LV AL\KA\DK\FS\GL\LEY\LI\KS\Q\DA\I\ST\MK\I\CV\NEY\T\FL\K
5806	1257	877	AVFTFHNGR\T\AN\LY\SL\H\SWL\G\IT\TV\FL\FA\CR\FL\G\FA\VF\LL\PW AS\W\LR\SL\K\PI\H\VF\G\A\I\SL\SI\AS\VI\G\I\NE\K\LF\SL\K\NT RPY\H\SL\P\SE\A\VF\AN\ST\G\ML\VV\A\G\LL\W\Y\I\LL\A\SS\W\K\RP
5807	2267	1302	R\FS\K\T\K\TR\RP\MA\VD\I\Q\PA\CL\G\Y\CG\K\T\LL\K\NG\ST\I\Y\G\EC\G\VC PR\G\Q\RT\NA\Q\K\Y\Q\CP\CT\ES\PE\LY\DW\Y\LG\FM\AM\PL\VL\H\W\FL\W Y\SG\K\K\SS\AL\Q\H\I\TA\LF\EC\SM\AA\I\T\LL\W\SD\PG\G\V\Y\I\R\SC\RV L\ML\SD\W\Y\TM\LY\NP\SP\DY\I\TV\H\CT\HE\AV\PL\Y\T\I\Y\Y\A\FL\K

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			LMMILRPLLVKKIACGLGKSDPKSITYAALYFFFILTVLQAVGGGLLYYAFPYIILVLVLSLVTLAVVMSASEIENCYDLLVRKKRLIVLFSHWLLHAYGIISISRVDKLEQDLPPLLALVPTPALFYLTAKFTEPSRILSEGANGH
5808	2	433	SLPDSGVVEYLSNGGVADNHKDGFELRYNECLMNFSNCNGKNGSSEGRITHGFLQKSAEYNNLMPYNTYTFDFKGVIDYIFYSKTHMV I GVIGPLDPQWLVENNITGCPHPHIPS DHFSLLTQLELHPPLP L VNGVHLPNRR
5809	464	2422	ILVFGFQGILHPGVYCALQSQHQAEQLVADIDECEVSGLCHGGRCVNTHGSFECYCIMDGYLPRNGPEPFHPTTDATSCTEIDCGTPPEVPDGYIIGNYTSSLGSQVRYACREGFFSVPEDTVSSCTGLGTWESPFLHCQEINCNPPEMRHAII L VGNHSSRLGGVARYVCQEGFESPGGKITSVCTEKWTWRSTLCTEILT K INDVSLFNDTCVRWQINSRINPKISYVISIKGQRLLDPMESVREETVNLTTSRTPEVC L ALYPGTNYTVNISTAPP R RSMPAVIGFQTAEV D LLEDGCSFNI S IFNETCLKLNR S R K V G S H E M YQFTVLCQ R W Y LANF H AT S FN F TTREQV P V V C L D Y PT T D Y TV N V T LL R S P R H SV Q ITIA T PP A V K OTISNISG F NET C LR W R S I K TADMEEMYLF H IW G QR W YQ K EF A QEMTFN I SSSR D P E V C LDL R P G T N V S LR A LS E LP V VIS L T T O I TE P PL P E V E F FTV H R G PL P R L R K A E K N G P ISSYQ V LV I L P L A Q S T F CD S E G A S F F S N AS D AD G Y V A E LL A K V DDAM E I P I G DR L YY G EE Y NA P L K R G S D Y C I I R I T E WN K V R R H SC A V W Q V K D SS I ML L Q M AG V GL G SL A V V I I T F L S FS A V
5810	3	1641	KVFGTHKDHEV T LD T AI S AV K V Q LA E F L EN L Q E K S LR I E A F V S E LES F FT I EN C SK N KE R LE E Q N E M KK V LA Q Y D E K A Q S F EE V K V KK M E F L H QM V H F L Q S M D T A K D T I V RE A E E EL D A V FLT S FE E IN R ER L LS A M E ST A S L K M PA A F S LE H Y Y DD S S A R D Q M K Q V A V P Q O P R LE P Q E P N S A T T TI A V Y W S M N K E D V I D S F Q V Y C M E EP Q D Q E V N E LV V E E Y R LT V K E S Y C I F E D L P R DC Y Q V W V MA N F T G C S L P S ER A I F T A P S T P V I R A E D C T V C W N T A T I R W R P T P EA T ET T Y L E C R Q H S PE G E G L R S F G I K G L Q L K V N L Q P N D N Y F Y V RA I NA F GT S EQ S EA I LIST R G T R F LL R E T A H PA L H I SS S GT V IS F G E RR R LI T IP S V L GE E LP S C G Q H Y W ET T TV D C P AY R LG I C S SA V Q A G L G Q GET S W Y M C SE P Q R Y T FF S Y G I V S D V H TER P AR V G I L L D Y NN Q R L I F INA E SE Q L F I I R H R F N E G V H P A F AL E K P G K T L H L G I E P PD S VR H K
5811	1918	851	AAALADLPEDPKWSAEKRRPLKSSLG Y EIT F S L N P D F K S HD V WDIEGAVR V Y Q PF N L G A G N P S V D S Q I LYY A M G V N P R F D S A S S YY S Y H MSL H P V IN P V E S R L G S S A S LY P V L N F LL V P E LA H S P LY I Q D K D G A P V A T N A F H S P R W G G I M V N V D S K T Y N A S V L P V R E V D M V R V M E V F L Q A LR F LL G F G I A Q P Q L P P K C L S G P T E GL M T W E L D R L L W A S V E N L A T T L T S L A Q L G K I S N I V I K D D V A S E V Y K A V A V Q K S A E L A S G H L A S A F V A S O E A V T S S E L A F D P S L L H L F P D D Q K F A I Y I PL F L P M A V P L S LV K I F L E TR K S W R K P E K T D
5812	5204	2744	GGRQRCQRGRSCGAREEEVE P G T AR P PPA A S M D A S L E K I A D P LA E M G K N L K E A V K M L D E S Q R T E E E N G K L I S G D I P G P L Q G S G Q D M V S I L Q L V Q N L M H G D E E P Q S P R I Q N I G E Q G H M A L L G H S L G Y I ST L D K E K L R K L T T R I L S D T T L W L C R I F Y E NG C AY F H E E E RE G L A K I C R L A I H S R Y E D F V V D G F N V Y LN M K P V I Y L S A A R P G L G Q Y LC N Q L G I P F P C L R C V P C N T V F G S H Q H M D V A F L E K L I K D I E R G R L P L L V A N A G T A V A G H T D K I G R L K E L C E Q Y G I W H V E G V N L A T L AL G Y V S S S V LA A A K C D S M T M T P G P W G L G P A V P A T LY K H D P A L T L V A G L T S N K P T D K L R A L P W L S L Q Y Q L G D G F V E R I K H A C Q L S Q R L Q E S L K V N Y I K I V E D E L S S P V V V F R F Q E L P G S D P V F K A V P V N M T P G S V G R E R H S C D A N R W L G B O L K Q L V P A S G L T V M D E A E G T C L R F S P L M T A V L G T R G E D V D Q L V A C I E S K P L V C T L Q L R E E F K Q E V E A T G L L Y V D D P N W S G I G V V R Y E H AN D D K S L K S Y P Q G E N I H A G L L K K L N E L S D L T F K I G P Y K S M K S C L Y V G M A S D N V H A A E L V E T I A T A R E I E D N S R L L E N M T E V V R K G I Q E A V E L Q K A T G R F N L T A G S L E S

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			TEPIYYVKAQGAGVTLPPTPSGSRTKQQLPGQKPFKRSLRGSDALSETSSVSHIEDLEKVERLSSGPEQITLEFASSTEGHPGAPSPQH TDQEAFQKGVPHPEDDHQSVEGPESLR
5813	2936	699	HRDGVSGLERPLTDRSRGAFQAQRGKMATAGGGSGADPGSRGLLRLSFcvLLAGLCRGNsVERKIVYIPLNKTAPCVRLLNATHQICGQSSISGDTGVIVHVEKEELDQWLTDPNPYPMVLLSKHTF RDLMEKLKGRTSRIAGLAVSLTKPSPASGFPSVQCPNDGFGVYSNSYGPFAHCRIQWNSLNGLAYEDFSFPFLFLLDENFTKVIKQCYQDHNLSQLNGSAPTFPLCAMQLFSHMAWLSFSTAT\CMRRS SIQSTSFSINPKIVCDPLSDYNVWSMLKPINTGTLKPDPRVVAAATRDLDSRSFFWNV\APGAESAVASFVTQLAAAEALQKAPDVTTL PRNMVFVFFQGETFDYIGSSRMVYDMEKGKFPVQLENVDSFVEL GQVALRTSLELWMHTDPVSQKNESVRNQVEDLLATLEKSGAGVP AVILRRPNQSQPLPPSSLQRFARNISGVVLADHSGAFHINKYY QSIYDTAENINVSYYPEWLEPLKE/ETWNFG*QDTAKALADTVT LGRALYELAGGTNFNSDTVQADPQTVTRLLYG\FLIKANNWFQS ILQGRDRLRSYLG*RGLFQH\YIAV\SSPINTIYV/VLQYALANLTGTUVNLTREQCQDPSPKVPSENKDLYEYSWVQGPLHSNE'DRLP RCVRSTARLARALSPAFLSOWNSSTEYSTWTESRWKDIRARIFL TASKELELITLTVGFGILJFSLIVTYCINAkadVLFIAPREPGA VSY
5814	8500	432	ALKCRPRRVLAILVGPVQPDRAAEEGAVALCVRVRPLNSREESL GETAQVYWKTHNNVIYPVDPGSKSFNFDRVHLGNETPKNVYEAI AAPIDSASIQCNGNTIFA\YQQT\ASGKTYTMMGSEDHLGVIPQ GQFHCHFHSQKI*EVFLDREFLLRVSYMEIYNETITDLCGTQKM KPLIREDVNRRVYVAIDLTEEVYTSEMALWKITKGEKSRYHE TKMNQRSSRSHTIFRMILESREKGEPSNCEGSVKVSHLNLVDLA GSERAATQGAAGVRLKEGCNINRSLFILGQVKKLSDGQVGGFI NYRDSKLTRILQNSLGGNPKTRIICITIPVSFDETTLALQFAST AKYMKNTPYNEVSTDALLKRYRKIEIMDLKQLEEVSLERTRAQ AMEKDQLAQLEEKDLIQKVNEKIELNTRMLVTSSSLTLQQEL KAKRKRRIIWCLGKINKMKNNSYADQFNIPNTITTCKTHKLSINL LREIDESVCSESDFVNSTLDTLSEIBWNPATKLLNQENIRESELN SLRADYDNLVLDYEQLRTEKEEMELKLKEKNLDEFEALERKTK KDQEMQLIHEISNLKNLVKHREVYNQDLENEELSSKVELREKED QIKKLQBYIDSQKLENIKMDLSYSLESIEDPKQMOTLFDAETV ALDAKRESAFLRSNLELKEKMKELATTYKQMENDIQLYQSQLE AKKKMQVDLEKELOQSAFNEITKLTSLIDGKVPKDLLCNLELEGK ITDLOKELNKEVENRALRREVILLSSELKSLPSEVERLRKEIJD KSEELHIITSEKDKLFSEVVHKESRVQGLLEIIGTKDDLAFTQ SNYKSTDQEFQNFKTLHMDFEQKYKVMVLEENERMNEIVNLSKE AQKFDSLSSGALKTELYSQTQELQEKTRVQERLINEMEQLKEQLE NRDSLPLQTVEREKTLLITEKLTQQLTLEEVTQTLTQEKDDLQLOESL QIERDQLKSDIHDTVNMMNIDTQQLRQNALESLQHQETINTLKS KISEEVSRNLIHMEENTGETKDEFQOKMVGIDKKQDLEAKNTQTL TADVKDNEIIIEQQRKIFSLIQEKENLQQMLESVIAEKEQLKTDL KENIEMTIENQEELRLLGDELKKQQEIVAQEKHNAIKEGELSR TCDRIAEVEEKLKEBSQQLQEKQQQLNVQEEMSEMQKKINEIE NLKNELKNKELTLEHMETERLELAQKLNENYBEEVKSITKERKVL KELQKSFETERDHRLGYIREIEATGLQTKEELKIAHHILKEHQE TIDELRRSVSEKTAQIINTQDLEKSHTKLQEEIPVLUHEQELLQ NVKKVSETQETMNELELLTEQSTTLDKSTTLARIEMERLRLNEKF QESQEEIKSLTKERDNLKTIKEALEVKHDQLKEHIRETLAKIQE SQSKQEQSLNMKEKDNETTKIVSEMEQFKPKDSSALLRTEIEMLG LSKRQLQESHDEMKSVAKEKDDLQLQEVLQSESQDQLKENIKEIV AKHLETEEELKVAHCKLKEQEETINELRVNLSEKETEISTIQKQ LEAINDKLQNQKIQIYEKEEQLNIKQISEVQEKVNELKQFKEHR KAKDSALQSIESKMLELTNRQESQEEIQIMIKEKEEMKRVOEA LQIERDQLKENTKEIVAKMKESQEKEYQFLKMTAVNETQEKMCE IEHLKQFETQKLNLNENIETENIRLTQILHENLEEMRSVTKERD DLRSVEETLKVERDOLKENLRETTIRDLKQEEELKIVHMHLKEH

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			QETIDKLRGIVSEKTNEISNMQKDLEHSNDALKAQDLKIQBELLRIAHMHLKEQQETIDKLRGIVSEKTDKLSNMQKDLENSNAKLQEKIQELKANEHQPLITLKKDVKNETQKKVSEMEQLKKQIKDQSLLSKLEIENLNLAQKLHENLEEMKSVMKERDNLRRVEETLKLERDQLKESLQETKARDLEIQQELKTARMLSKEHKEETVDKLREKISEKTIQISDIOQDKDLSKPELQKKIQBLQKELQLLRVKEDVNMSHKKINEMEQLKKQFEPNVLCKCEMDNFOLTTKHLHESLEEIRIVAKERDELRRIKESLKMRDQFATLREMIAIRDQRQNHQVKPEKRLLSDGQQHLMESLREKCSRIKELLKRYSEMDDHYECLNRLSLDLEKEIEFHRIKKLKYVLSYVTKIKEEQHECINKFEMDFIDEVEKQKELLIKIQLHQODCDVPSRELRLDKLNQNMDLHIEBILKDFSESEFPSIKTEFQQVLSNRKEMTQFLEEWLNTRFDIEKLKNGIQKENDRICQVNNFPNRRIIAIMNNESTEERERSATISKEWEQDLKSLKEKNEKLFKNYQTLKTSLASGAQVNPTTCDNKPNPHVTSRATQLTTEKIRELENSLHEAKESAMHKESKIIKMKCELEVTNDIIAKLQAKVHESNKCLEKTKEITQVLQDKVALGAKPYKEEIEDLKMKGKIDLEKMKNAKEFEKEISATKATEVYQKEVIRLLRENLRSSQAQDTSVISEHTDPQPSNKPLTCGGGSGIVQNTKALIKSEHIRLEKEISKLKQONEQLIKQKNELLSMNQHLSNEVKTWKERTLKRRAHKQVTCENSPPSPKVGTGASKKKQITPSOCKERNLQDPVKEPKSCFFDSRSKSLPSPHPVRYFDNSSSLGLCPEVQNAEVSVDQP\GPWRLFQGKDVP\ECKTQ
5815	23	1460	SELWMWTVQNRESLGLLSFPVUMITMVCCAHSNEEPSNMSVYKETVDRLLKGDIRLRPDFFGPPVVDGMRIDVASIDMVSEVNMDYTLTMYFOQSNKDKRILSYSGIPLNLTLDRNVRADQLWVPDTYFLNDKKSFVHGVTVKNRMIRLHPDGTVLYGLRITTAACMMDLRRYPLDEQNCTLEIESGYTTDDIEFYWGEGAVTGVNKIELPQFSIVDYKMSKKVEFTTGAYPRLSLSFRLLKRNIIGYFILQTYMPSTLITLSSWSFWINVDASAARVALGITTVLTMTISTHLRETLPKIPYVKAIDIYLMGCFVFVFLALLEYAFVNLYIFFGKGPQKKGASKQDQSANEKNKLEMNKVQDAHGNILLSTLEIRNETSGSEVLTSVSDPKATMYSYDSASIQYRKPLSSRE*GRAPDRHGVPSKGRIRRAS\QLKVKIPDLDVNSIDKWSRMFFPITPSLFNVVYWLYYVH
5816	861	191	TSSRSRAAAQEGDAETPGSVERRGRRAGAEDGMSQAPGAQPSPPTVYHERQRLELCAVHALMNVLQOQLFSQEAADEICKRLAPDSRLNPHRSLLGTGNVDNVIMAALQGLGLAAVWWDRRRLSQLALPQVLGLLILNLPSPVSLGLLSPRLRRHLRWPCARL/VTVSYYNLDS\K\LRAPEGPGGLRTE*GPFLAAALAQGLCEVLLVVTKEVEEKGSWLRD
5817	851	118	RLFRGPGANRGRCSRGCSCGGREPSGGALPKRHCP**PPSPPAADVMSNTTVPNAPQANSDSMVGYVLPFFLITLVGVVVAVVMYVQKKRVDLRLRHLLPMYSYDPAEELHEAEQELLSDMGDPKVV\QAGRVATSTSGCHCWSMRSRDLTPLPHPSEPGVLDCLGPCHLLPLLSPGSPCWVGLHFSLHPSAASASHALITSLPPGLLPFVGVELTAHQQALMGRGFPSGMAAGRHLCLF
5818	3	3918	QALRDKLWIFLWVQSFYAVRHTESWKLMSDDQOKIQAQAFDKGDDRRLGKKPIFSSSSQQRKQVSDSGDIKIKSWRGNNKKECWSYLSTNKKMKSQDGLGASGHSSSTNRNSINKTLQDDVKEKDGTKIASKITKELKTTGGKVNSGPKTVTKSNTENGDKARLENMSPRQVVERSTAATAAAATGQKNLLNGKGVRNQEGQISCARPKVLTGNNLVQAKAKPLKKATGKDSPCLSITAGPSSRSTDSSMFEFSISTECLDEPKENGSTEEEKPSPGHKLSFCDSPGQMMKNSVDSVKNSTVAIKSRPVSRVTINGTSNKSIEQDNTVNNSVLKKVSGKGCEPVPQAILKKRGETSNGCTAAQORTKSTPSNLTKTQGSQGEPSNSVKSSVSSRQSDENVAKLDHNTTTEKQAPKRKMVKQVHTALPKVNAKIVAMPKNLNSQSKGETLNNKDSKQKMPGQVISKTQFSSQRPLKHETSTVQKSMFHDVRDNNNKDSVSEQKPHKPLINLASEISDAEALQSSCRP\DPQKPLNDQEKEKLALECONISKLDSKLKHELESQJICLKDSETKFPNHKETDDCAANICCHSVGSNDNVNSKFYSTTALKYMVSNPNENSENSNPVCDLDSTSAGQIHLISDRENQVGRKDTNQSSIKCVEDVSLCNPERTNGTLNSAQEDDKSKSVPEGLTIPOSKLSDESAMDEDKH

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			ATADSDVSSKCFSQLSEKNSPKNMETSESPESHETPETPFVGH WNLSTGVLHQRESPESDTGSATTSSDDIKPRSEDYDAGGSQDDD GSNDRGICSKCGTMLCHDFLGRSSSDTSTPEELKIYDSNLRIEVK MKKQSSNDLFQVNSTSDEIPRKRPEIWSRSAIVHSRERENIPR GSVQFAQEIDQVSSADETEDERSEAENVAENFSISNPAPQQFQ GIINLAFADEDATENECREFSANKFKRSVLLSVDECEELGSDEGE VHTPFQASVDSFPSDVFDGISHENHHGRTCYSRFSRESEDNILE CKQNKGNSVCKNESTVLDLSSIDSSRKNKQSVSATEKKNTIDVL SSRSRQLLREDKKVNNNGSNVENDIQQRSKFLDSDVKSQERPCHL DLHOREPNSDIPKNSTKSLDSFRSQVLPEQGPVKESHSTTEK ANIALSAGDIDDCDTLAQTRMYDHRSKTLSPPIYEMDVIEAEFQ KVESETHVTDMDF*DDQHFAKQDWTLKQLLSEQDSNLVDTNSV PEDLSLAQYLINTLLLARDSSKPOGITIHDTLNRWSELTSPLD SSASITMASFSSEDCSPQGEWTILELETOH
5819	1	5557	AAAGLLGALHLVMTLVAAARAEEKAFFVQSESIIIEVLRFDDGG LQTETTLGLLSSYYQKKSISLYRGNCRPIRFEPPEMLDFHEQPVGMP KMEKVYLHNPSSE*TITLVSIAFTTSHFHASFFQNRKILPGGN SFDVS/VFLARVGNVENTLFIINTSNHGFTY\OVFGVGVNPY RLRPLFLGARVTVNSSFSPPIINHNPHESEFLQVVEEMYSSGGDI\HL ELPTGOQGGTRKLWEIPPYETKGVMRASFSSREADNHTAFIRIK TNASDSTEFIIILPVEVEVTTAPGIYSSTEMLDFGTLRTQDLPKV I\NLHLLNSGTTKDVPITSVRPTPQ\NDAITVHFKPITLKAS\ESK YTKVASISFDASKAKKPSQFSKKITVKAKEKSYSKLEIPYQAEB LDGYLGFDHAATLFHIRDSPADPVERPIYLTNTFSFAILHDVL LPEEAKTMFKVHNFSPKVLLPNESGY\IFTLLFMPSTSSMHIDN NILLITNASKFHLPPRVYVTGFIDYFVLPPKIEERFIDFGVLSAT EASNILFAIINSNPIELAIKSWHIIGDG\LSIELVAVDRGNRTT IISSLPECEKSSSDQSSVTLASGYF\AVFRVKTAKKL\EGIH DGAQITTDYELLTIPVK\AVITAVGSLTCSPKHVVLPPSPFGKI VHQSLNIMNSFSQVKVHQSLNIMNSFSQVKVHQSLNIMNSFSQVK KKSXIANIYFDPGLQCGDHCVYGLPFLSKSEPKVQPGVAMQEDM WDADWDLHQSLFKGWTGIKENSGHRLSAIFEVNTDLQKNIISKI TAELSWPSILSSPRHLKFPLTNINCSS\EEEITLENP\SDQDPV YVQFIPALAYSNPSPVFDKLVSRFNLSKVAKIDLRTLEFQVFRN SAHPLQSSTGFMEG\LSPHLLNLILKPGEEKSVKV\FTPVHN RTVSLIIVRNNTLTVMDAVMVCGCCTTENLRVAGKLPGPGSSLR FKITEALLKDCTDSLKLREPNTLKRTFKVENTGQLQIHIETIE ISGYSCEGYGFKVNCQEFITLNASANASRDIIILFTPDTASRVIR ELKFITTSGSEFVFILNASLPYHMLATCAELPRPNWELALYII ISGIMSALFLVIGTA\YLEAQGIWBP\FRRRLS\FEASNPPFD VCRFDLRRIRVGISSEGNNLNTLSCDPGHSGRCFCGAGGSSSRPSA GSHKQ*GPSGHPHSSHSNRSNADVDDVRAYNSGRTSSMTSAQAA SSQPANKTRPLVLDNTGAQGHSGAGRKSKGAKQSQHGSQHHAHS PLEQHPQPPLPPPVPQPQPERLSPAPLAHPSPHERASSARH SSESDSDITSLIEAMDKDFDHDSPALEVFTEQPPSPLPKSKKG KPLQRKVKKPQQEEKEKKGKGPKQDEDELKDSLADDDSSSTTE TSNPDTEPLLKEDTEKQKGKQAMPEKEHESEMSQVKQSKKLLNI KKEIPTDVKBSSLELPYTPPLESKQRRNLPSKIPPLPTAMTSGSK SRNAQKTKGTSKLVNDNRPALAKFLPNSQELGNTSSSEGEKDSP PPEWDSVPVHKPGSSSTDLYKLSSLQTLNADIFLKQRTSPTPAS PSPPAAPCPFVARGSYSSIVNSSSSDPKIKQPNGSKHKLTKAA SLPGKNGNPTFAAVTAGYDKSPGGNGFAKVSNKTFGSSSLG HAPVDSGDSGSSGLWSPVSNPSSPDFTPLNSFSAFGNSFNL VFSKLGSLRSCNQASQRSWNEFNSGSPSYLWESPATDPSPSWPAS SGSPHTATSVLGNNTGLWSTTPFSSSIWSSNLSSALPFTT PAN TLASIGLMGTENSAPAHAPSTSPADDLGQTYNPWRWSPTIGR RSSDPWSNSHFPHEN
5820	310	1270	RVSLSGPVSLGVILCARSSSTMGKRDNRVAYMNPIAMARSRGPIQ SSGPTIQ\VI*IDQGLPGKK*KSN*KRKRK/DSKALAEFEKMN ENWKKELEKHREKLLSGSESSSSKKRQRKKKEKKSW*\DSSSS\ SSSSDSSSSDSEDEDKKQGKRRKKKRNRSRHSKSSSESMSETES

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			DSKDSLKKKKKKDKGTEKEKDIDKGLSKRKRM*SEDKFLSSESLS ESEYIEEVRAKKKKSSEREKATEKTKKKKKHKKHSKKKKKAASSSPDSP*H*EKSGFPYKESAMSEEISTVKTTTYLLKCMNFLVF GIIPGLFSSHSDAIV
5821	179	915	KWRNQSWRWPKGPNWMLSCSCVCWRRVTWTGSVWMMRKLGKHPQT PT/IKDCTAATGKRPSARFPHQRRKKRREMDGLAEQQPQRSN TYVIKLFDRSVDLAQFSENTPYPLICRAWMRNSPSVRERECSPS SPLPLPEDEEG\SEVTNSKSRS\CVQACPPHTPGQQPKNACR\SRIPSPLAALRMQGTP\RWSPFPEPEPSPSTLIYRNMQRWKRIRQ RWKEASHRNQLRYSESMSKILREMYERO
5822	464	4379	QTLKEMPIVMARDLEETTASSSEDEBEVISQEDHPCIMWTGGCRRI PVLFVHADAIITKDNINRIVIGERYHLSYKIVRTDSRLVRSILTA HGFHEVHPSTDYNNLMTGSHLKPFLLRTLSEAQKVNHFPFRSYE LTRKDRLYKNIIRMQHTHGFKAFKILPQTFLLPAEYAEFCNSYS KDRGPFLVYKPVASSRGRGVVYLINNPQISLEENILVSRYINNP LLIDDFKFDVRLYLVLTSYDPLVIYLYEEGLARFATVRYDQGAK NIRNQFMHLTNYSVNKKSGDYVSCDDPEVEDYGNKWSMSAMLRY LKQEGRDTTALMAHVEDLIITTIISAEALAIATACKTFVPHRSSC FELYGFVDVLIDSTLKPLLEVNLSPLSLACDAPLDLKIKAISMISD MFTVVGFCQDPQARASTRPIYPTFESSRRNPFQKPQRCRPLSA SDAEMKNLUVGSAREKGPGCKLGGGSVLGLSMEEIKVLRVKEENDR RGFFIRIFPTSETWEIYGSYLEHKTSNMVYMLATRLFQDRMTADG APELKI\SLNSAKLHAALYERKLLSLEVRKRRRRSSRLRAMRP KYPVITQPAEMNVKTETESEEEEVALDNEEDEQEAQSSEAGF LRENQAKYTPLSTALVENTPKENSMKVREWNNKGHHCKLETQE \ZEPKFNLQMQLQDNGNLSKMQRARIAFSAYLQHVQI\RLMKDMSG QTFSASWAKEDEQMELVURFLKRASNNLQHSLRMVLPSSRLALL ERTRILAHQLGDFIIIVYNKETEQMAEKSKKKVEEEEDGVNM ENFQEIRQASEAELLEEVLTFTYTKQNKNSASVFLGTHSKISKNNN NYSDSGAKGDHPETIMEEVKIKPPKQQQTTEIHSKLSRFTTSA EKEAKLVYSNSSSGPTATLQKIPNTLSSVTSDLSPGPCHHSS LSQIPSAIPSMPHQPTILLNTVSASASPCLHPGAQNIIPSPTGLP RCRSGSHTIGPFSSFQ9AAHIYSQKLSRPSSAKAGSCYLNKHHS GIAKTQKEGEDASLYSKRYNQSMVTAELQRLAEKOARQYSPSS HINLLTQVNTNLNLATGIINRSSASAPPTRLPIISPSPGTWSTQ SDPQAENHSSSPGSRSLQTGGFAWEVENVYVQATGVVPQH KYHPTAGSYQLQFALQOLEQQKQLQSRQLLDOSRARHQAIFGSQTL LPNSNLWTMNNAGCRRISSATASQKPTTLPQKVPPPSSCASL VPKPPPNHEQVLRATSQKASKGSSAEGQLNGLQSSLNPAAFV\ ITSSSTPAHTKIMMHKTHEKQPV\HHSWVHD
5823	42	2293	LLTALSMEGGGRDEPSACRAGDVNMDDPKKEDILLLADEKFDFD DLSLSSSANEDDEVFFGPGFHHERCIAASLELNNPVPEQPLP TSESPFAWSPLAGEKFVEVYKEAHLALHIESSSRNQAAQAKP EDPRSGQVERFIQESKF\KINLFEKEKEMKKSPTLSKRETYVLS DSPLJLGPPVGEPRLLASSPALPSSGAQARLTRAPGPPHSAHALP RESCTAHAASQAATQRKPGTKLLLPRASVRGRGI\PGAAEKPKK EIPASPSRTKIPABKESHRDVLPDKPAPGAVNVPAAGSHLGOGK RAIPV\NKLGLKKTLLKAPGSYSN\LQRKSSSGA\WWSGASSA CTPQVAKAKSSASFIPAN*LGPLCPNISKS\GRMGPAMLRLPA L\PAGPVG\ASSWQAKRVDVSELAAEQLTAPP\SASPTQPQPTPE GGG\QWLNSSCAWSESSQLNKTRSIRRDSCLNSKTKVMPPTN QFK1PKFS\GDS\EDSSTPKLRSRAQRPQSCTS\GRVTVHSTPVR RSSCPAPQSLLSAWRVSALPTPASRRCSGLPPMTPKTMRAVGS PL\CVPARRSSEPRKNSAMRTEPTRESNRKTD\SR\LVDVSPDR GSPPSRVPQALNFSPPEESDSTFSKSTATEVAREEAKPGGDAAPS EALLWDIKLEPLAVIPDAASQPLIDLPLIDFCDTPEAHVAVGSE SRPLIDLMNTNPDMNKNVAKPSPVVGQLIDLSSPLIQLSPEADK ENVDSPLLK
5824	42	2293	LLTALSMEGGGRDEPSACRAGDVNMDDPKKEDILLLADEKFDFD DLSLSSSANEDDEVFFGPGFHHERCIAASLELNNPVPEQPLP TSESPFAWSPLAGEKFVEVYKEAHLALHIESSSRNQAAQAKP

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			EDPRSGQVERFIQESKF\KINLFEKEKEMKKSPTLSKRETYVLS DSpLLGPPVGEPRLASSPALPSSGAQARLTRAPGPPHSAHALP RESCTAAASQAATQRKPGTKLLLPRAAASVRGRGIPGAAEKPKK EIPASPSRTKIPAKEKESHDRDVLPDKPAPGAVNVPAAGSHLGQGK RAI/PVP\NKLGLKTTLLKAPGSYSN\LQRKSSSGA\VWSGASSA CTPQPVAKAKSSEFASIPAN*LPGLCPNISKS\GRMGPAMLRPA L\PAGPVG\ASSWQAKRVDVSELAEEQLTAPP\SASPTQPQTPE GGG\QWLNNSSCAWSESSQLNKTRSIERRDSCLNNSKTVMPTPTN QFKTPKFSIGDS\PDSSTPKLSRAQRQPQSCTSVGRVTVHSTPVR RSSGPAPQSLLSAWRVSALPTPASRRCSGLPPMTPKTMPPRAVGS PL\CVPARRRSSEPRKNSAMRTPEPTRESNRKTDSP\LVDPSPDR GSPPSRVPQALNFSPEESDSTFSKSTATEVAREEAKPGGDAAPS EALLVDIKLEPLAVTPDAAASQPLIDLPLIDEFCDTPEAHVAGSE SRPLIDLMTNTPDMMNKNAKPSPVVGQLIDLSPLIQLSPEADK ENVDSPLLK
5825	2	4210	FLQIESASPAPFSSGFLAAHPHSPGGSLATKCRSRLSAPGMLHL SAAPPAPPPEVTTATARPCLCSVGRRGDGKMAAAGALERSFVEL SGAERERPHRFREFTCVCSIGTANAVAGAVKYSESAGGFYVYESG KLFSTVRNRFIHWKTSGDTLELMEEESLDINLLNNAIRLKFCQNCS VLPGGVVYVSETQNRVIIILMLINOTVHRLLLFHPSRMYRSLLVVD SQMOSIFTDIGKVDFTDPNCNYQL\PAVPGISPNSTASTAWLSSD GEALFALPCASGGI\FLVKL\PPYD\PGMVSVVLELKQSSVMQLLT GWMPTAIRGDQSPSDRPLSLAVHCVEHDAFIFALCQDHKLRLMWS YKEQMCLMADMLEYVVPKKDLRLTAGTGHKLRLAYSPTMGLYL GIF\MHAPKRQFCIFQLVSTESRQYSLDHSSLFTSQETLIDF ALTSTDIAWLHDAAENQTVVVKYINFENHVAGQWNPVFMQPLPEE EIVIRDDQDPREMYLQSL\FTPQGFTNEALCKALQIFCRGTERNL DLSWSELKKEVTLAVENELQGSVTEYEFSQEEFRNLQQEWFCKF YACCLQYQEALESPLAHLHNPHTNMVCLLKKGYLSFLIPSSLVD HLYLIPYENLLTEDETTISDDWDIARDVICLICKCLRLIEESVIV DMSVIMEMSCYNLQSPEKAAEQILEDMITIDVENVMEDICSKLQ EIRNPITHAIGLLIREMDYETEVEMEGKGFNPQPLNIRMNLQLY GSNTAGYIVCRGVHKIASTRFLICRDLLLILQQLLMRLGDAVIWG TGQLFQAQQDLLHRTAPLSSYLYIKNGSECLATDVPDLTLESN LQHLSVLELTDSGALMANRFVSSPQTIVELFFQEVARKHIIISHL FSQPKAPLSQTGLNWPEMITAITSYLLQOLLWPSNPGCLFLECLM GNCQYVQLQDYIQLLHPWCQVNVCRCFMLGRCYLVTGEQKQAL ECFCQAASEVGKEEFLDRLIRSEDEIVSTPRLQYYDKVRLLLD VIGLPELVITQLATSAITRASDDW\KSQATL\RTCIFKHHL\DLG \HNSQAYGSL*PQIPDSSRQLDCRLRQLVVVLCCRSQQLQDLVEFS YVNHLHNEVVGIIIESRARARVDMTHNYYELLYAFHIYRHNYRKAG TVMPFEYGMRLGREVRTLRLGEKGQNCYLAALNCI\RLRPEYANI VQPVSAGVYDRPGASPKNRDGECTAAPTNRQIEILELEDLEKE CSLARIRTLAQHDPSSAVAVAGSSSAEEMVTLIVQAGLFDTAIS LCQTFKLPLTPVFEGLAFCIKLQFGEEAAQAEAWAWLAANQLS SVITTKESSATDEAWRLLSTYLERVKVQNNLYHHCVINKLHSHG VPLPNWLINSYKKVDAELLRLYLNYDLDLTPYQVIRICGC
5826	3	871	KSQLRDHSAPPKPCPTSVGAMGC*PRQ/SPEKQQQLKKQKRN AAAQRSRQKHTDKADALHQHQHESLEKDNLALRKBIQSLQAEALW WSRTLHVHERLCPMDASCAPGLLGCDQAEGLLGPGPQGQHG CREQLBLFQTPGSCSYPAQPLSPGPQPHDSPSILLQCPLPSLSLGP AVVAEPPVOLSPSPSPLLFAASHTGSSIQGSSSKLISALQPSLTAQTA PPQPLBLEHPTRGKLGSSPDNPSSALGLARLQSREHKPALSAT WQGLVVDPSPHPIIAPPLLSSAQVHF
5827	194	2287	GMGSENSALKSYTIIREPPFTLPSGLAVYPAVLQDGKFASVFVYK RENEDKVNAAKV**HLKTLRHPCLLRFSLCTVBEADGIHLVTE RVQPLEVALETLSSAAEVCAQIYDILLALIFLHDGRHLTHNNVCL SSVFVSEDEGHWKLGGMETVCKVSQATPEFLRSIQSIRDPAIPP EEMSPEFTTLPECHGHARDASFGTIVESLLTILNEQVSADVLS SFQQTLHSTLLNPIPKWRPALCTLLSHDFRNDFLEVNVFLKSL TLKSEEKTEFFKPLLDRVSCLSSEELIASRLVPLLLNQLVFAEP

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			VAV\KSFLPYLLCPKDKDHAQGETPCLLSPALFQSRV\PVLLQLF EVHEEHVRMV\LSHIEAYVGALS\REQLKKV\IL\PQVLIG\LR D\TSDSIVAITLHSLAVLVSLLGPEVVVGGERTKIFKRTAP\SF TK\NTDLSLEGDPFSQPKIFP\INGLSDVKNT\SEDSENFPSSKK SEEPWDWSGP\EPENQTVN\QIWP\REP\CDDVKSQCTTLDV EESSMPWCKSSLPKISLVQRGDDADQIEPPKVSSQERPLKVPSEL GLGEEFTIOVKKPKVKDPEMDWFADMIPEIKPSAAFLILPELRT EMVPKKDDVSPVMQFSSKFAAAITEGEAEWGWEEGELNWEDNN W
5828	2	257	AREGGSLGAVAACGELS\YSCDFCPARPHTS\W\TRFVKM\EFQAVV MAVGGGSRMTDLSSI\PKPLLPGVNKP\LIY\LNLLERVG\EEEV IVVTTRDVQKALCAEFKMKM\KPDIVCIPDDADMGTA\DSLRYIYP KLKD\TVLVLSCDLITDVALHVV\LDLFRAYDASLAMLMRKGD\SI EPVPGQKGKKAKEQRDFIGVDSTGKRLLFMANEADLDEELVIK GS\LQKHPRIRFH\GLVDAHYCLKKY\IVDPLMENG\SITSIRS EL\IPYLV\RGKQFSSASSQGQTRKEEGGSKGKRLKSPRISY SFY*KEANYTGTGAPY\D\ACWI
5829	260	1259	FDCRLIVECSDEKTIKIWDDTTNKQCVNNFSDSVGFANFVDNPS GTCIASAGSDQTVKWDVRVNKLHQYQVHSGGVNCIS\PHPSGN YL\TASSDGT\KILDLLKGRLIYT\LQGHTG\VFVTFVSFSKGELF ASGGADTQVLLWRNTN\DE\HCKGLTKRN\KRLHFDS\PPHLLDIY PRTPHPHEEKVETVEDFFLHLRLIQS*SICRSLLPL\WISF LLILPQQQKPVVGLC\TRV\KRPVDIS*TLP*CHQNV\CO\PRKRK QKT*VTP\SVK\VS\PLAVTDALEHIMEQ\LN\VL\TQTV\SL\QRL LTLTED\KLKD\CLENQQK\L\FS\AVQK\WS
5830	4496	3139	CGKMAAPEERDLT\QE\QTEKLLQFQDLTGIESMDQCRHTLEQHNW NIEAAVQDRLNEQEGVPSVFNPPPSRPLQVN\TADHRIYSYVVS\ R\QP\RG\LLG\GY\LI\MLP\FR\TY\TILD\I\RF\ALRF\IRP\DR\SRV TDPVGD\TV\SF\HM\HSEEKYGRAHPV\YQG\TYSQALND\AKREL\RF\ LVY\LG\DDH\QDS\DEF\CRNTLC\APEV\SL\NTRMLFWAC\ST\NKPE GYRV\SQL\RENTY\FLAM\ML\KDR\RE*PV\VG\R\LE\GL\I\Q\PD\DL INQLT\FI\MD\AN\Q\T\LV\SL\ER\LE\ER\RN\Q\TC\VL\R\QQ\DE\AY\LA\SLR ADQE\K\ER\K\K\RE\ER\K\RR\K\KE\EE\QQ\K\LA\EE\RR\RN\Q\K\EE\K\ER\K LE\CL\PP\EP\SP\DD\PE\SV\K\I\FK\LP\N\DS\RV\ERR\H\FS\Q\SL\TV\H\DF LF\SL\K\ES\B\K\F\Q\IE\A\N\FP\RR\VL\PC\IP\SE\W\NP\PT\Q\E\A\ GLS\H\TE\VL\F\Q\DL\T\DE
5831	71	2897	FCS\KDKC\CL\LP\DS\IN\RS\K\SC\IA\K\PG\A\HS\Q\DR\H\AV\MD\SE\R\Q\K\D\ T\DD\I\ES\PK\RS\I\RD\G\Y\I\DC\W\DS\RS\SD\LS\PP\RH\GR\DD\SF\DS\LS\ DS\FG\RS\RS\Q\TP\SP\DV\LR\G\SS\DG\RS\G\SD\SE\SL\PH\RK\I\PD\VK\K\DD\MS\ AR\RT\SH\G\EP\K\SA\VP\FN\Q\Y\LP\N\K\SN\Q\T\AY\VP\PA\PL\RK\K\KA\EE\Y\R\ K\SW\ST\AT\SP\AG\LG\K\K\AL\Q\Y\G\PT\PV\VS\DD\A\EST\SM\FD\MC\3\EE\ EAA\VP\H\PS\RA\Q\R\Q\L\Q\LN\Q\L\RE\DD\K\W\Q\DD\L\AR\W\K\SR\K\RS\VS\ Q\DL\K\K\EE\B\K\ME\K\LL\A\G\ED\G\T\ERR\K\K\I\TY\RE\I\Q\K\ER\K\ RE\REL\H\EA\Y\K\N\A\R\Q\EE\A\EG\I\L\Q\Q\Y\I\ER\T\I\SE\A\VL\LE\MP\K\I\LE\ R\SH\ST\EP\N\L\SS\FL\N\DP\N\PM\K\Y\LR\Q\Q\SL\PP\K\FT\AT\V\ET\T\I\AR\AS\ V\LT\T\SM\SA\G\G\SP\K\I\V\TP\K\A\VP\ML\T\PK\Y\SP\Q\PK\N\Q\DV\K\T\K\K\ V\DG\K\V\SV\N\G\ET\V\H\RE\EE\K\RE\CP\T\VA\H\SL\T\K\S\Q\MF\G\VAR\H\ G\SP\LE\K\Q\DN\G\S\I\I\N\I\K\K\PN\SP\Q\EL\A\AT\T\K\T\B\PN\Q\SE\K\N\D\ GG\K\SR\K\G\N\I\EL\A\SE\Q\H\FT\T\T\T\RC\SP\T\VA\VF\PP\SS\PL\K\N\D\ V\SE\K\Q\K\K\PE\N\MS\G\K\V\EL\V\LS\Q\K\Y\K\PK\SP\PE\AT\LT\T\PF\FL\ K\MP\EA\N\O\H\LP\N\LN\SO\VD\SP\SS\K\SP\VT\TP\K\W\A\DP\EE\ERR\ Q\K\W\Q\Q\K\Q\ER\LL\Q\ER\Y\Q\K\ED\K\Q\K\L\K\EE\W\K\A\Q\K\VE\EE\ERR\ Y\EE\Y*I\I\ED\PP\VV\PT\TV\SS\SS\Q\L\ST\SS\SM\TE\G\G\T\M\N\K\I\DL\ G\N\C\Q\DE\K\Q\DR\RW\K\K\SF\Q\G\DD\SD\LL\K\T\RE\SD\R\LE\B\K\G\SL\TE\CA\ AH\G\N\P\VS\K\G\V\H\ED\H\Q\LD\TE\A\G\PH\G\T\N\P\Q\LA\Q\D\PS\Q\N\Q\TS\N\ P\TH\SS\BD\VP\K\T\PL\LD\K\I\N\H\Q\I\Y\SP\B\ERR\K\SI\G\K\K\LC\SS\G\L\ PL\G\K\G\A\MI\I\ET\LN\I\Y\H\I\Q\CF\RC\G\I\CK\G\Q\LG\DA\VG\T\DV\K\R\ NG\LL\N\CD\Y\MR\RS\I\SA\G\Q\PT\T\
5832	2454	829	PGRRFRHGSCAFQKQCIMLHICQYFLQGECKFGT\SC\K\RS\H\DF\SN\ SEN\LE\K\LG\MS\SD\LV\SR\LP\T\Y\RN\A\H\DI\K\N\K\SS\A\PS\RV\PP\LF\

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			VPQGTSERKDSSGSVSPNTLSQEEGDQICILYHIRKSCSFQDKCH RVHFHLPYRWQFLDRGKWEIDLDDNMELIEEAVCNPKIERILCSES ASTFHSHCLNFNAMTYGATQARRLSTASSVTKPPHFIITTDWIW YWSDEFGSWQEYGRQGTIVHPVITVSSSDVEKAYLAY/WYTGV*R PGSHLEVPGRKAQLRVRFQSLRSEKPGLWHN*KGLPQTQIR\AP QDVTMTCNTKFPGPKSIPYWDNTSALPDGFQKITLSSSEE YQKVWNLFNRTPFYFVQKIERVNLAWEVYQWOKGOMOKONG GKAVEROLFHGTSAIFVDAICQQNFDWRCVGVHGTSYGKGSYF ARDAAYSHHSKSDTQTHTMFLARVLVGEFVRGNASFVRPAKE GWSNAFYDSCVNSVSDPSIFVFEKHQVYPEYVIQYTTSSKPSV TPSILLALGSLFSSRQ
5833	170	3289	SILCLLSPCVVQFGKPVVSILSSRSRHSPECTKKWEGMRKHLHT RQGHK*VHVEISKALWVYRDDYFIRHSISVSAVIVRAWITHKYR GRDWNVKWEENLLHAVALAKNTYLQTIPLPERPFKDHCVCLEWNM GYIWLRLANRIPQCPLENDVALLGFPYASSGENTGIVKKFPRF RNRELEATRRQRMDYPVFTVSLWLYLLHYCKANLCGILYFVDSN EMYGTPSVLITEEGYLNHQMLVKGEDLAVKTKFIIPLKEWFRL DISFNGGQIVVTTTSIGQDLKSYHNQTISFREDFHYNDTAGYFII GGSRYVAGIEGGFFGPLKYYRLRSLPAQIFNPMLLEKQLAEQIKL YYERCAEVQHIVSVYASAAKHGERQZACHLHNSYLLDQRRYGR PSMCRAPFWEKELDKHPDSLFOALLEMDLLTVPRNQNESVSEIG GKIFEKAVKRLSSIDGLHQISSIVPFLTDSSCCGYHKASYLAV FYETGLNVRDQLOQMLYSLVGGQGSERLSSNNLGYKHYQGIDN YPLDWELSYAYYSNIATKTPLDQHTLQGDQAYVETIRLKDEIL KVQTKEDGDPWMWLKHEATRGNAAAQQRLAQMLFWGQCGVAKNP EAIAIEWYAKGALETEDPALIYDYAIVLFKGQGVKKNRRLALELM KKAASKGLHQAVNGLWYHHKFKNYA\AAAKYWLA\EE\GMN PDASYNLGLVHLHDGIFPGVPGRNQTLAGEYFHKAAQGGHMEGTL WCSLYYITCNGLETFRPRDPEKAVVWAKHVAEKNGYLGHVIRKGLN AYLEGSNHEALLYVLAATGIEVQTSQNLAHICEERPDLARRYL GVNCVWRYYNNFSVFQIDAPSFAYLKMGDLYYYGHQNQSQDLELS VQMYAQAAALDGSQGFFNLALLIEEGTILPHILDPLEIDSTLH SNNISILQELYERCWSHSNEESFSPCSLAWLYLHLRLLGWAILH SALIYFLGTFLLSILIAWTVQYFQSVSASDPPPRPSQASPTAT STASPAVTAAADASDQDQPTVTNNPEPRG
5834	17	4020	RFRGGGGVFFGAPASPSDSLGLQGNSQGPRTPKPPRT/QECG SAAPGPIPGQSSS*PVLRLEQIQQKADCPLSLELALKPRMAAQV TLEDALSNDLLEELPLPDQQPCIEPPPSSLYQPNTNFEDR NAFVTGIARYIEQATVHSSMNEMLEEGQEQYAVMLYTWRSCRAI PQVKCNEQPNRVEIYEKTVEVLEPEVTKLMNFMYFQRNAIERFC GEVRLCHAERRKDFVSEAYLITLGKFINMFAVLDELKNMKCSV KNDHSAYKRAAQFLRKMDPQS1QESQNLMSFLANHMKITQSLQ QLEVISGYEBLLADITVNLCDVYENRMLTPSEKHMLLKVMGF GLYLMGDGSVSNIYKLDAAKRINLSKIDKYFKQLQVPLFGDMQI ELARYIKTSAYEENKSRTCTSSGSSPQYNICEQMIQIREDHM RFISELARYNSEVVTGSGRQEACKTDAEYRKLFDLALQGLQLL SQWSAHVMEVYSWKLVHPTDKYSNKDCPDSAAEYERATRNYTS EEKFALVEVTIAMIKGLQVLMGRMESVFNHAIRHTVAAALQDFSQ VTLMEPLRQAIIKKKNNVIQSVLQAIRKTVCDWETGHEPFNDPDL RGEKDPKSG*DIKVPRRAVGPSSTQLYMVRTMLESLIADKGSK KTLRSSLEGPTILDIEKPHRESFFYTHLINFSETLQQCCDLSQL WFREFFLELTMGRIQFFPIEMSMPWILTDHILETKEASMMEYVL YSLDLYNDSAHYALTRFNKQFLYDEIBAEVNLCFDQFVYKLADQ IFAYYKVMAGSLLLDKRLSECKNQGATIHLPPFSNRYETLLKQR HVQLLGRSIDLNRLLITQRVUSAAMYKSLELAIGRFSEEDLTSIVE LDGLLEINRMTHKLLSRLTLDGFDAMFREANHNVASPYGRITL HVFWELNYDFLPNYCNGSTNRFVRTVLPFSQEFQRDKQPNQAP QYLHGSKALNLAAYSSIYGSYRNFGPPHFQVICRLLGYQGIAVV MEELLKVKVKSLLQGTILQYVKTLMEMVMPKICRCLPRHEYGSPGIL EFFHHQLKDIVEYAEALKTVCFQNLRREVGNAILFCLLIEQSISLE EVCDLLHAAPFQN1LPRVHVKEGERLDAKMKRLESKYAPLHLVP

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			LIERLGTPOQQIAIAREGDLLTKERLCCGLSMPEVILTRIRSFLD DPIWRGPPLPSNGVMVHDECVEFHRLWSAMQFVYCIPVGTHEFTV EQCFGDGHLHWAGCMIIIVLLGQQRRFAVLDFCYHLLVKQKIIDGKD EIIKNVPLKKMVERIRKFQILNDEIITILDKYLKSGDGEGTTPVE HVRCFQPPIHQSLASS
5835	4209	1904	SGNIRMAQGSQ1DQVQLHDLRQKFPEVPEVVVSRCMLQNNNNL DACCIVISQESTRYLGEGDNLNSDDSGISGLRNHMITSLNLDLQ SQNIYHHGREGSRMNGSRTLTHSISDQQLQGGQSNSELFQQEPQ TAPAQVPQGFNVFGMSSSSGASNSAAPHLGFLGSKGTSSLSSQQT PRFNPIMVTAPNITQGRNTPTSLHIHGVPVVLPNQPGNSIYI RPyITTPGGTTRQTQQHSGWVSQFNPMNPQQVYQPSQPGFWTT PASNPLSHTSSQQPNQQGHQTSHVYMPISSPTTSQPTIHSSGS SQSSAHQSQYNIQNISTGPRKNQIEIKLEPPQRNNSKLRSRGPR TSSTSSSVNSQTLRNQPTVYIAASPPNTDELMRSRSPQPKVYISA NAATGDEQVMRNQPTLFISTNSGASAASRNMSGQVSMPAFIHH HPPKSRAIGNNSATSPRVVVTQPNTE\ETFKITVSPNKPAVSP GVVSPPTFELTNLLNHPDHVYETENIHLLTDPTLAHVDRISETRK LSMGSDAAYTQDI*RIISNWLGMVAHACNSSAALGGQDGRII*A QEFTSWGNIWRLRFL*NYAGMVTAHCTSPSYSD*ALLVHQ KARMERLQRELEIQQKKLDSLKLSEVENEMENNLTTRRLKRNSNS QIPSLEEMQOLRSCNRQLOIDIDCLTKEIDLQFQARGPHFNPSAI HNFYDNGIFGVGPVPPKPKDQRSSIITPKTQDTEDEGAQWNCTA CTFLNHPALIRCEQCEMPRH
5836	361	2303	FHITMCIGCCSVNFSABHFSODLKEDLLYNLKORGPNSSKQLLK SDVNYQCLFSAHVHLRGLVLTQPVEDERGNVFLUNGEIFSGIK VEAEENDTQILFNYLSSCKNESELTSLFSEVQGPWFYIYYQASS HYLWFGRDFFGRRSLLWHFNSNLGKSFCLSSVGTQTSGLANQWE VPAS\DFSELTLSLSSFPDALFYNCILGNIFLGRILLKKMLIA* VKFQQTQHLYQRT*QMKPNCILKNLLFL*I*CCHKLHWRLIAVI FPMCHLQERYFKSFLIMYT*KEVQOFIDVLSVAVKRVLCLPR DENLTANEVLTKCDRKANVAILFSCGIDSMVIATLADRHIPLDE PIDLLNVAFIAEKTMTPTFNREGNKQKNKCEIPSEEFSKDVA AAADSPNKHVSVPDRITGRAGLKEQAVSPSRWINFVEINVSME ELQKLRTRICHLIRELDTVLDDSIGCAVWFASRGIGWLVAQEG VKSYQSNAKVVLTGIGADEQLAGYSHRVRFQSHGLEGLNKEIM MELGRISSRNLGRDDRVIDGHKEARFPFLDENVVSFLNSLPIW EKANITLPRGIGEKLRLAALVELGLTASALLPKRAMQFGSRIA KMEKINEKASDKCGRQLIMSLENLESIEKETKL
5837	4792	903	NGNAVAQAPVINCCYLATGSKDQTIRIWSCSRGRGVAMILKLPF KRRGGIDPTVKERLWLTLHWPNSNQPTQLVSSCFGGEELLQWDLT QSWRRKYTLFSASSEGQNHSRIVFNLCPLOTEDDKQQLLSTSMD RDVKWCWDIATLECSWTLPSLGGFAYSLAFSSVDIGSLAIGVGDG MIRVWNTLSIKNNYDVKNFWQGVKSKVTAICLWHPTEGCLAFGT DDGKVGLYDTSNKPQISSTYHKKTVYTLAWGPPVPPMSLGE GDRPSLALYSCGGEGIVLQHNPWKLGSGEAFDINKLIRDTSNISKY KLPVUTEISWKADGKIMALGNEDGSTIEIFQ\IPNLKLCITQOH HKLVNTISWHHE\HGS PAQKLSYL\MPSGSQCSPFTCHNLKNC P*KAAPESPSPDPLQSPYRTPPPQGHTAQDYPVWAWEPHIH*WEGL VFCFPIDGYSPGWD\AFPGKEAPVAIFRG\HQGRLLCVAWSPL DPDCIYSG\ADDFCVHKWLTSMDHSRPPQGKKSIELEKKRLSQ PKAKPKKKKPKTLRTPVKLESIDGNEEESMKENSGPVENGSDQ EGE\QAREPELPCCGLAPAVSREPVICTPVSSGFEKSKVITNNKV ILLKKEPPKEKPETLIKKRKARSLLPLSTS LDHSKEELHQDCL VLATAKHSRELNEADSADVEERFHGLFTDRATLYRMIDIEGKG HLENCHIPELFHQLMLWKGDLKGVLTQAAERGELTDNLVAMAPAA GYHVWLWAVEAFAKQLCFQDQYVKAASHLLSIHKVYEAELLKS NHFYREAIATIAKARLRLPEDIPLVLDLYLSWGTVLERDGHYAVA CYLGATCAYDAAKVLAKKGDAASLRTAAELAATVGEDELASLA LRCAQELLANNWVGAQEALQHESLQGQRILVFCLLELLSRHLE EKQILSEGKSSSSYHTWNTGTEGPFVERVTAVWKSIFSLLTPEQY QEAFQKLQNTIKYPSATNNTPAKQL\LHICHDLLAVLSQQMASW

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			DEAVQALLRAVRSYDSGSFTIMQEYVSAFLPDGCDHLRDKLGDHQSPATPAFKSLEAFFFLYGRLYEFWWSLSRCPNNSVWVRAGHRTLSVEPSQQLDTASTEETDPESTSQEPPNRPSLELDRLTTEGERMLSTFKELFSEKHASLQNSQRTVAEVQETLAEMIROHQKSQLCKS TANGPDNEPEVEAEQPLCSSQSQCKEEKNEPPLSPELTKRLTEANQRMAKFPESSIKAWPFPDVLECCLVLLIRSHFPGLAQEMQQQAQELLQKYGNNTKYRRHQCQTCM
5838	110	98	KTMPHLLVTFRDVAIDFSQEEWECLDPACQRDLYRDMVLENYSNLISLLESSCVTKLKSPEKEIYEMES\PSGRIGWNVSTITFQYQINGCDNMECKGNLLEGQVSXSEGLYMCVKITCEEKATESHSTSSTFHRII/HYQGKIVKCKECRQGFSYLSCLIQHEENHN*KCSEVNKH RNTFSKKPSYI*HQ\KFRLGKPYECMECGKAFCGRTSDLIQHQKJHTNEKPYQCNAACGKAFIRGSQQLTEHQRVHTGEKPVDCKKCGKA FSYCSQYTILHQRIHSGEKPYECKDCGKAFILGSQQLTYHQRIHSGEKPYECKEGKAFCILGSHLTYHQRVHTGEKPVCYKECGKAFLCA SQLNEHQRIHTGEKPVECKECGKTFGRSQLTYHLRVHSGERPYKCKECGKAFIGNSNLIQHQRIHTGEKPVKCKECGKAFIGKQLS EHQRHTGEKPFECKECGKAFIRVAYLTQHEKIHGKHYECKEGKTFVVRATQLTYHQRIHTGEKPVKCKECDAF/HLNLTLSEHQ RIHRGEKPVECKOCGR/LFIRGSHL/NEHLRHTGEKPVECKECGRAFSRGSEHTLHQRIHTGEKPVTCQCGKDRCPSQLTQHTRLHN*EYSSHICMHSIALASDFAHLQEKNPEN
5839	1	2425	GRPFPRPPRALPRLPLRGRQRDGRWTVDFFEECLD\SPRFRAALEEVEGDVAEELKL\DKLVKLCIA\MDTGKAFCVANKQFMNGIRD\LAQNS\NNDA\VVETKFAPSFLDSLQEMINFHTIL*PNSB1N*GHSFQNFVK3DLRKFKDAAKKQFENSQ\KRKKIALVKNAPVPSRPASLEL*KPNILTATRKCFRHIALDYVLQINVLSQKRRSEILKMSLSFMYAHIAFFHQGYDQMLGPMYKDLGQQLDRLLVGDAAKEKREMEQKHSTIQQKDFSRDDSLKLYKVNDAANGIVMEGYLFKRASNAFKTWNRWFWSIQNNQVYQKKFDNDPVTVVVEDLRLCTVHKCEDIERRFCFEVSVPTKSCLMQADSEKLRQAWIKAVQTSI\ATAYREKDDSEKLDKXSSPSTGSDLSQGNESKEKLLKGESALQRVQCIFGNASCCDCGLADPRWASINLGITLICIECSGIHRSLSGVHFSKVRSLLTDTWEPEBLKLMCELGNDVIRVYEANVERKMGIKKPQPGORQEKEAYIRAKYVERKFVDKIFL*SLSPPIEQQKK\FVSKSSEERKLSISKFGP\GDQVRASAQSSVRSNDSGIQQSSDDGRESLPSTVSANSLYEPGERQDSSMFLDSDKHLNPGQLQYRASYEKNLPKMAEALAHGADVWNANSEENKATPLI\QAVLGGSLVTCFLLQNGANVNQRDVQGRGPPLHHATVLGHGTQVCLFLKRGANQHATDEECKDPLSIAVEAANADIVTILLRLARMNEEMRESEGLYQPGDETYQDIFRDFSQMASNNPEKLNRFQQDSDQKF
5840	698	3610	KHLHLPRQHLLTLWQISSLSPRWS*QRAFMSALSKTQTOSAPALQGLSSLLQSVTGNPVPASEAASQSTSASPANTTVYTIKGRLNLPSSAQPFIPKSFNYS*PNSSTSEVSSTSASKAS*IGQSPGLPSTAFKLP*SNTKGFTATHNTSPAAPPTEVTCIQSSEVS*KPKL*ESESTSPL*EMKIHFPLKGMPGFSVA*NLKHPNPGASLGSAPSES*HSDFQ*RGPTSTSIDNIDTPVDRERSGTFQDEMMDKPTSSSVDTMSSL SKIISPGSSTS*STRSPPPPGRDES*VPRELSNSVSTYRPFGLGSESPYKQPSDGMERPSSLMDSQ3KFPDTSFQEDEDYRDFEYSGPPSAMMNLLQKKPAKSILKSSKLSDTTTEYQPI*LSSYSHRAQEFGVKSAFPPSVRALLSSENCDRLSSSPGLFGAFSVRGNEPGSDRSPSPSKNDSSFFTDPNSHNSLSQSTTGHLSLQPKQYDPSH*PVPHRSLFSPQNTLAAPTGHPPTSVGEVKLASTISTSTIEFKNMLKNNASRKPSSDDKHFGCQPSKGTPSDGVSLNSLTQPSLTTADQQQGEHEYRIETRVS*SSCLDLPDSTEBKGAPIETLGYHSANRMRM3GEP*IQTVESIRVPGKGKGNRGRHGREASRVGWFDLSTGSSFDNGPSSASELSLGGGGSGGL*TGFKTA*PYKERAPQFQESVGSFRSNFNSTFEHHLPPSPLEHGT*FQREPVGPSA*PPVPPKDHGGLF*FSRDA*THLPSVDLSNPFTKEAALAHAA*APPPP*PGEHGS*IPFPT*PPPPP*PGEHSSSGGGVGP*ST*PPPPP*PVDHS*GVVP*PAPLAEHGVAGAVAVKWDHSSLLQGT*LAEHFGVLPGP*RDRHGGP*TQD*LNGPGLSRVRESL

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			TLESHSLEHLGPDHGGGGGGGSNSSSGPPPLGDSHRDTISRSGITLRSRPDPFRPREFFLSRDPFHSLKRPRPPFARGPPFFAPKRFPPRY
5841	1908	762	GLRLFLVLTVWPMMKPSWLSRTEF SKRLLCRTLWCQSGWSSRSY TRSMLKMTTSINR SRSTSKTSTSARPLATATVSIGLSDSPTW RHCMWTARCS CGEKGHHWA PRQVGVYLLPGRVGCVSSRVSPSF PGDLDGSLARRGS AVASALASGLVEEPMMLGPF FHPTPRFKAVSAK SKEDLVSQGFTEFTIEDFHNTFM D LIEQVEKQT SVADLLASFND QSTS DYLVVYLRLLTSGYQLRESKFFEHF1 EGGRTVKEFCQ\QE \VEPMCKESDHIIHII ALAQGLQRVHPGWBYMGPRPRAATTNPHI FP*GLPSPKVYLLYRPG\HYDILYKIGLGSSPLGCPGCPLARA LGHCYRGFSVVVKWSYFTPFPLSHDPPP MFY
5842	307	1918	QEPTADF KLRSTCGCGREMTCPDKPGQLINWFICSLCVPRVRKL WSSRPRTRRNLL LGTACATYLGFLVSQVGRASLQHQAAEKGP HRSRDTAEPSFPEIPLDGT LAPPESQGN C STLQP NVV ITLSRK RSKPANIRGTVKPKRKKKH AVASAAPCQEA LVG PSLQ PQA EG KMLM\H LGLT LREQT WLRLES DPGG WCGVRE\WRAGGPDFLQ PSS RESNIRIYSESAPWSL SKD DIRM RL A DSAVAGL RFPVSSRSGA RLLVLEGGAPGAVLRCGSPCG LLKQPLDMSEVFAFHLDRL ILG NRTLP S VSRKA E FIDQ GRPCPII LWDA S LSSA NDTHS VKL TW GTYQQLLKQKC WQNGRVPK PESG CTEIHHHEWSKMA LF DFL LQI YNR LDTNCCGFRPK E D ACVQN GLRP KCD DQG SA ALA HII QR KH DPRHLV FIDNK GF FDR SEDDNLF KLL EGI KEP PASA VY VLKS QH LRQKLL OSLFL DKG YWE S QG GRQ GIE K LID VIE HRA KI LITY IN AHGV KV LPMN E
5843	500	1453	GTARLVT C WLGQ*VKKPAWE PGV VVWL*Q*RCRPKGWGLGAGM RGSRMSQP PQCL RQA QSSC CHFMV KLL DDGT FMIPGEKVAHTSL DALVTFHQ QKPI EPRRELLT QPC RQKD PANV DYEDL FLY SNAVA EEAACPVSAPEEASPKPV LCHQS KERK PSAEM/RQNNHQGSHFL LPPKIPS WRDP PETLEEPQNAPR ER PEGPAAKKPRHCELV VT LGCPEI HGD LRP DRK RQ P RSL RG SHL GG QRL HG SLC GHIS QKP LTAPG T K RQ KG PHQEG REV GQ LH*GDP RGQELA P NG SE P IL PG VQARAP GLG RA
5844	202	2471	FDSAVLSSINVMAVLPGLQLLGVLVLTISLSIRL IQAGAYYGI KPLPPQI P P QM P P QI P QY QP LQ QV PHM PLAKDGLAMG KEMPHL QY GKEYPHL P QY MK E IOP A P R M G K E A V P K K G K E I P L A S L R G E Q G PRGE PG P R G P P G P G L P G H G I P G I K G K P G P Q G Y P C V G K P G M P G M P G K P G A M G M P G A K G E I G Q K G E I G P M G I P * P Q G P P G P H G L P G I G K P G G P L Q P G P K G D R G P K G L P G P Q C L R G P K G D K G P C M P G A P G V K G P G M H G P P G V G L P G V G K P G V T G F G P \Q G P L G K \P G A P G E P G P Q G P I G V P G V Q G P P G I P C I G K P G Q D G \I P G Q P G F P G G K G E Q G L P G L P G P G L P G I G K P G P G P K G D R G M G G V P G A L G P R G E K G P I G A P G I G G P P G E P G L P G I P G P M G P G P G P G A I G F P G P K G R G G I V G P Q G P P G P K G E P G L Q C F P G K G F L G E V G P G M R G F P G P I G P K G E H G Q K G V P G L P G V G L L G P K G E P G I P G D Q G L Q P G P G I P G I G G P S G P I G P P G I P G P K G E P G L P G P P G P F G I G K P G V A G L H G P P G K G A L G P Q G Q P G L P G P P G P P G P P A V M P T P P P Q G E Y L P D M G L G I D G V K P H A Y G A K K G K N G G P A Y E M P A T E L T A P F P P V G A P V K F N K L L Y N G R Q N Y N P Q T G I F T C E V P G V V Y F A Y H V H C K G G N V V A L F K N N E P V M Y T D E Y K K G F L D Q A S G S A V L L R P G D R V F L Q M P S E Q A A G L Y A G Q V H S S F S G Y L L Y P M
5845	215	2061	HASNKSASLQDKRMANPKEKTAMCLVNELARFN RV QPQYKLLNER GPAHSKMF SV QLSL GE QT WESE GS S I KKA QQAVGN KALT E S T L P KPI * KPK S NSV N N N P G C I T P T V E L N G L A M K R G \KPAI HRPLDPK PFPNMRANYNFQVMYNQRYHCP I P K I F Y V Q L T V G N N E F F G E G K T RQAARHN AAM KAL QAL QNEPIPERSPQNGESGKDMDDDKDANKS E ISL VF E I A L K N P V S F E V I K E S G P P H M K S F V T R V S V G E F S A E GEGNSKKL S K K R A A T I V L Q E L K L L P P L P V V B K P \HFFKKRKP T IVKAGPEY GQGMNFISRLAQI QOAKKEKEPDYVLLSERGMPRR E F V M Q V K V G N E V A T G T G P N K K I A K K N A A E A M L L Q L G Y K A S T N L Q D Q L E K T G E N K G W S G P K G F P E P T N N T P K G I L H L S P D V Y Q E M E A S

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			RHKVISGTTLGVLSPKDMNQPSSFFSISPTSNSSATIARELLMNGTSSATAEAIGLKGSSPTPPCPSPVQPSKQLEYLARIQGFQVHYCDROSGKECVTCLTLAPVQMTFHAIGSSIEASHDQV*YATAILLCYGPKRKWAIAKMBAMCAHAALLSLIHYLLAPSARLEKSKLALGN.
5846	1126	456	FSKLIMKTFIIGLSGVNTNSGKTTLAKNLQKHLPNCSVISQDDFFKPESEIETDKNGFLQYDVLEALNMEMKMMMSAISCWMEARHSVSTDQESAEIIPILIIEGFLFLFNPKPLDTIWNRSYFLTIPY3ECKRRRSTRVYQPPDSEGYFDGHVWPMYLKYRQEMQDITWEVVYLDGTKSEEDLFLQVYEDLIQELAKQKLCQVTA*RRNTTNPS/CK*IRKLQGVI
5847	2769	505	APEMEDLSSPDSTLLQGHHNLSSASFQESVTFKDVIVDFFTQEEWKQLDPGQRDLFRDVTLNEYTHLVSIGLQVSKPDVISQLEQGTEPWIMEPSIPVGTCADWETRLENSVASAEPDISEEELSPEVIVEKHKRDDSWSSNLLESWEYEGLERQQANQQTLPKIEKVTEKTIPSWEKGPVNNFGKSVNVSSNLVTQEPEPSEETSTKRSIKQNSNPVKKEKSCKCNECGKAFAFSYCSALIRHQRHTHCEKPYKCN/CVEKAFSRSENLINHQRITGDKPYKDCQCGKGFLLEGPSLTQHQRIHTGEKPYKDCEGKAFSQRTHLVHQHRIHTGEKPYTCNECGKAFSQRGHFMHEHQKIHTGEKPFKCDECCKTFTRSTHLTQHQKIHTGEKTYK CNECGKAFNGPSTFIRHHMIHTGEKPYECNECGKAFSQHSNLTQHQKTIITGEKPYDCACBGKFSFYWSLSLAQHLKIHTGEKPYKCNCGKAFSQRHQTQHRRHIHTREKPFECSECCKAFSÝLSNLNQHQKTHTQEKAYPECKEKGKAFIRSSLAKHERIHTGEKPYQCHECKGKTFSYGSSLIQRHKIHTGERPYCNCGRFNQNIHLTQHQRIHTGA KPYECAECKCAFRCSSLAQHQKTHTEEKPYQCNKCEKTFQSSSHLTQHQRIHTGEKPYKCNCECDKAFAFSRSTHLTQHQRIHTGEKPYK CNECGK\TFSQSTYLIQHQRIHSGEKPGCNDGKSFYRSLAN KHQRHPGI
5848	22	2961	AAPRRLRGDGDRTPRFPPLALLRPGPAAAPFRRKMPAVSKGDGMRLGAVFISDIRNCKSKAEAIKRINKELANIRSKFKGDKALDGYSKKYVCKLLFIFLLGHIDFGHMEAUNLSSNRYTEKQIGYLFISVUVNSNSELIRLINNAIKNDLASRNPTFMCGLALHCIASVGSRMMAEAFAAGEIPKVLVAGDTMDSVKQSAALCLLRLYRTSPDLVPMGDWTTSRVVHLNDQHLLGVVTAATSLITLIAQKNPEEFKTSVSLAVSRLS\RIVTSASTDLDQDYTY*FCPGFLGLSVKLLRLIQCYPFPDPAVRGRLTECLETLINKAQEPPSKKVKQHSNAKNAVLFEAISLIIHDSEPNLLVRACNQLGQFLHQRETNLRYLALESMCTLA SSEFSHEAVKTHIETVINALKTERDVSVRQRADVILLYAMCDRSNAPQIVAEMLSYLETADYSIREEIVLKVAILEAKYAVDYTW\YVDTILNIRIAGDYVSEEWYRVIVIIVINRDDVQGYAAKTVFEALQAPACHENLVKGGYILGEFGNLIAGDPRSSPLIOFHLLHSPKHLCSVPTRALLSTYIKFVNLFPEVKPTIQDVLRSDSQLRNADVELQORAVEYRLSTVASTDILATVLEEMPPFPERESSILAKLKKKGPTVTDLEDTKRDRSVDVNGGEPAPASTSAVSTPSPSADLLGLGAAPPAPAGPPPSSGGSGLLVDFSDSASVVAPlAPGSEDNFARFVCKNNGVLNFENQLQIGLKSFRQNLGRMFIFYGNKTSTQFLNFTPTLICSDDLQPNLNLTQKPTDVLPEVQEGGAQVQCVVNIETCSDFTPEAVPVLNIQFRYGGTFQNVSQNLPTLNKFQOPTEMASQDFFQRWKQLSNPQQEVQNIKAKHPMDTEVTAKAIIGFGSALLEEVDPNPANFVGAGIIHTKTTQIGCLLRLEPNLQAQMYRLTLRTSKBEAVSQRCELLSAQF
5849	3545	1895	KRREIKETVFHHVAQAGLELLSSNPPSSASRSAGITGMRHQVOP*DCMSLSPPCFTEDRFSLEALQTIHKQMDDDKDGGIEVEESDEFIREDMKYKDATNKHSHLHREDKHITIEDLWKRWKTSEVHNWTLEDTLQWLIEFVLPQYEKNFRDNNVKGTTLPRIAVHEPSFMI SQLKISDRSHRQLQLKALDVVLFGPLTRPPhNWMKDFILTWSIVIGVGGCWFAUTQNKTSKEHVAKMMKDLESLOTAEQSLMDI0ERLEKAQEENRNVAKEQNL*RKMMDIEINYAKEEACRLRELREGAECELSRQYAEQELQEVQRMALIKKAEKEFELRSSWSVPDALQKWLQLTHEVEVQYYNIKRQNAEMQLAIAKDEAKIKKKRSTVPGTLHV

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			AHSSLDEVHDHKLEAKKALSELTTCLRRLI\RWQQIEKICGFQIAHNSGLPSLTSSLYSDHSWVMPRVSIIPPYIAGGVDDLDDETPPIVSQFPGTMAKPPGSLARSSSLCRSRRSIVPSSPQPQRAQLAPHAPHSHPRHPHHPQHTPHPSLSPDPDILSVSSCPALYRNEEE EEAIYFSAEKQWEVPDTASECDSLNNSIGRKQSPP/SKPRDIPN IIS/DERYQEMRCP*RIP3GGIL
5850	3	1895	KAVLNFSASGSVISLTGSNPMHDASMWHLKNGTIVYLDVPLLN LICRLKLMKTDRIVGQNSGTMKDLLKFRRQYYKKWYDARVFCE SGASPEEVADKVLAIAKRYQDVSETFISTRHVWPEDCEQKVSAEFFIEAVIEGLASDGGLFVPAKEFPKLCGEWKSLSVGATYVERA QILLERCIPADIPAAARLGEMIETAYGENFACSKIAPVRHLSGN QFILELFHGPTGSFKDLSIQLMPHIFQAQCIPSCNCYMLVATSGDTGSAVLNGFSRINKNDKQRIAVVAVFFPENGVSDFQKAQIIGSQRENGWAVGVESDFDCQTAIKRIFNDSDFGFLTVEYGTILSSA NSINWGRLLPQVYVHASAYLDLVSQGFISFGSPVDVDVCIPTGNFG NILAACYAKMMGIPIRKFICASQNQNHWTDFIKTG\HYDLRGKEN*AQFFTVO*IFLPNLSNLERHLHLMANKDQLMTELFNRLESQHHFQIEKALVEKLQQDFVADWCSERGECLAINSTNTSGYILD PHTAVAKVVADRQDKTCVPVIISSTAHSKFPAPAIMQALKIKEINETSSSQLYLLGSYNALPPLHEALLERTKQQEKMELYQVCAADMNVLKSHVQEQLVQNQFI
5851	3120	1802	RCYLFQFLALLTSTSARAAAIAAAEFPAGSPSVMTRAGDHNRQRGCCGSLADYLTSAKFLLYLGHSLSTWGDRMWHFAVSFLVELYGNSSLTAVYGLVAGSVLVLGAIIGDWVDKNARLKVAQTSLVVONVSUILCGIILMVMFLHKHELTMYHGWLTLSCYILIITIANIANLASTATAITIQRDWIVVVAGEDEDRSKLANMNAТИRIRDQLTNILAPMAVGQIMTFGSPVIGCGFISGWNLVSMCVEYVLLWVKVYQKT PALAVKAGLKEEETELKQLNLHKDTEPKPLEGTHLGMVKDSNIH ELBHEQEPFCASQMAEPFRFRDGWVSYNNQPVF/LGWHGSCFP LYDCPGL*LHHHRVRLHSGTEWFHPOYFDGSISYNNNGNCFSY LATSKMWFGSDRSDLRIGTAFLFDLVCDCLCIHAWKPPGLVRFSE
5852	1	422	KTTFPSSCLPRLQLPEVRGYSQGPPLTDPLISLCSRHKCRKGWGSSSYPSLPALLRARSAPGHCTHRSCCGPEWRIDSISRLEMQGARRSGWAQAQPTI LLVPRPLRKSLSIWG/SLMGFFITSGPG/WFRQ YYFFISGRH*VLFTESDFYVAMDFGGHGLSSHYS PGV YQLQT FVSEIRR VVAGKKQS V YF R RCGGCSRAPPLITGGVGSRKQRWP ESGAWALAPGLPAI HGRSWES
5853	223	1346	RLLGLSRVKGLHGPAAASAWIDSDP E TRGDPCGPWGMWRGSDLRPRPVSITGLTLCVCK*AAQGPQV\HSVVKLCFGLGG\PCLL\FPI IFR LLLHPRRPRLHPGTRGVAVEPHALRVVHVAHGEAGIRAAGPGH GGVEI IPQG\VGSLGARRGLRSPRSSRHNRPAPP PG RPLATP HRR RFPDPALT C PGLQDQGPREQQKQGSGRHD T ILGDWGESE SRWVRGN FRTGTAATLIGFSRN P T L NGSENWGSLSV I QEEGPDT GWEREKRNP AE MGNP QRWASP\HTP PL GPEILRAMPEALRAMP E ALGLRPPD AT SVP S ALS\QTF/PESW PR SCLRNQGETLGMGPVP LSSLCITE SP S QNWT P C LL LTC P RGLF
5854	86	938	KGRNTAPEKKGAALNNRENASS*NGY/SRWKQDIRRIENHI I QE LKHLCAMI KRVLLERLENTRKLRELTEGRTLDWPQNRITE V SAK RQIV TYREKGKRN*EEKKRDL E GRSRRYNLCIIGIPETEDRAS GAET IKD L LE/EN F PELKNE D LQMEKA H RIPLKF N EKKAA R H I RV T FL/KFQRRN I ILQASSQRKQV T YKGAKVRLTSDF S PAILN A RROW/N/PI S RV L RBN N FE P R I Y S AK L SFLV K GNW K TFLDIQG LGKY INQELSLKILLKD L QLTENLN
5855	536	2391	LRSYGCKAPS R ISHLHK\FLFLLLP S LLMGYSES F PPITD S WAP F ISLTHHVL S QS Q PL S SSNCW I CL S TH T Q*FTALPAD L LWT T QSNV S LHISYLA I P F LA D FL K PKV/L*PGNSAKHLSFKLSSLSM V S G RAV L LLIAS G LT S IQ T NTASS K PP I W G Y\L S T Q TS F IS PP PLCL S RT Y PN P A H TM V GQ V PQ S LC G L I FTL/R T PCR P SIL H PN Y KI I TS A WQ K V L C S G S PT I H T SL H L T T G S S LS F H P IP G FP A AN S AL Y V S SL K G PP G K N V T I P S P V T G *Q P PH R GS N /RL T VD K D N

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			FFLSFKPNDSLHQLPSQ\TPYQALTGAALAGSYPIWENENTLSQLPTFTYNFCCLSTPSLFFLCDTN\Y\CLPANWSGTCTLVQAPTTINILPPNQTILISVEASISSSPIRNKWLHLITLLTGLGITAALGTGIAGITTSITSYQTLFTTLSNTVEDMHTSITSLQRQLDFLVGVLQNRVRLDLLTTEKGTCIYLQEECCVCVNESGIVHIAVRLHDDAAEL*HQVAJSSWQGSSLLRWIPWVAPFLGPLIFLFLLMIGPCIFNLVSRFISQRLNCFIQASMQKHIDNIFHLCHV*YQSLRGNHSEAPEPRP
5856	173	1137	PWLHGLGLSAVFLFYLY*/YVTFHLYGGIILLLIFISIAGILYKFQDVLLYFPEQPSSRLYVPMPTGIPHENIFIRTKDGIQLNLILIRYDGDNSPYSPTIYFHNAGNIGHRLPNALLMLVNLKVNLLEDYRGYCKSEGEASEEGLYLDSEAVPLDYUMTSPDLDKTKYLGSRSLG\GAAAIHLASDNHSRISAIMVENTFLSIPHMASTLFSFFFPMRYLPLWCYKNNFKLSYRKISQCRMPSLFISGLSDQLIIPPVMKQLYELSPSRTKRLAIFPDGTHNDTWQCQGYTALEQFIKVVKSHSPEEMAKTSSNVII
5857	1597	563	KLIGKVLVLVSVAADAMAFAVEPQGPALGSEPMMLGSPTSPKPGVNAQFLPGFLMGDLPAVPTQOPRSISGPSPVGVMEMRSPLLAGGSPPQVVPAAHKDKSGAPPVRSLYVYDDISPGLGSTPLTSRRQPNISVMQSPLVGVNSTPQTGQSMFSPASIGOPRKTTLSPAQLDPFYTQGDSLTSEDH\LDDSWGDCTIWGFLKASA\SYILL\QFAQYGGIS*NMWMSNTGNWMHIRYQSKLQARKALKDGRIFGESIMIGVKPCIIDKSVMESSDRICALSSPSLAFTPPIKTLGPTQPGSTPRISTMRPLATAKYKASTSDYQVISDROTPKDKDESLSKAMEYMFCA
5858	355	1419	PPHQVAAASTSXHQQQQPPPPPQDSSKPVVAQGPGPAPGVGSAPPASSAPPATPPTPSGAPPGSPGPPPTPTPPPAVTSAPPGAPPPTPPSSGVPTTPQAGGPPPPPAAVPGPGPKQGPGPGGPKGGKMPGGPKPGGGPGLSTPGGHPKPPHRGGEPRGGRQHHPPYHQHHQGPPPGGGPGRSEEKISGPRRGFKANLSSLRRPGEKTYTQRCRFLLGIVLLTSRNMNSRRLFAKIWENQEKFSTKAKDSEFIKLESRALA*NCPKPELG*YTP*GGRQLPSSLFPHTACLPLSCSVIFSPFMFPQ*NCWGRKPFRPNLGPFLKGAVCNRWDDPWEGBTGKGHCLNFAS
5859	307	1503	GGSSARPRASSRRMLSRRKKTKEVSKPAEVQGKYVKKETSPLLRNLMPSFIRHGPТИPRTDICLDPSSPNAFSTSGDGVVSRNQSFLRTPIQRTPHEIMRRESNRLSAPSYLARSLADVPREYGSQSFTVEVSFAVENGDGSGRYYSDNFEDGQKRPLGDRAHEDYRYEYNHDLFQRMQPNQGRHASICGRVAATSLGNLNTNGSEDLPLPGWSVDWTMGRKYYIDHNTTTHWSPHPLEREGLPPGWERVESSEFGTYYVDHTNKKAQY\RHPCAPTCTSV\STTSCHI/AS/RQQTERNQSLLVPANPYHTAEIPDWLQVYARAPVKYDHILKWEFLQALDLYQGMKLKLLFMKELEQIVKMYEAYRQALLTELENRKQRQQWYAQQHGKNF
5860	2956	1270	TIRVEEFLCPGGGKAQLSSASLLGAGLLLQPPTPPPPLLLLPFLLLFSRLCGALAGPIIVEPHVTAVWGKVNLSKCLIEVNETITQISWEKIHKGSSQTVAVHHPQYGFVQGEYQGRVLFKNYSLNDACITLHNIGFSDSGKYICKAVTFPLGNAQSSTTVLVEPTVSLIKGPDSLIDGGNETVAACIAATGKPVAHIDWEGDLGEMESTTSFPNETATIISQYKLFPTRFARGRRITCVVKHPALEKDIRYSFILDIQYAPEVSVTGTGVDWFVGRKGVNLCNADANPPPKSVWSRLDGQWPDGVLASDNTLHFVHPLTFNYSGVYICKVT\NSPGSKEVTQKVHPTFQDPSLPLTYBPLPALQFWASPSTA*TSD\LATEP*KIASPSPLSTL\ATIKGWTLPLTIIA\CSGVGALPIV\LVKCFGJF CYRRRTFRGDYFAKNYIPPSDMQKESQIDVLQQDELDPPYDPSVKKENKNPVNNLIRKDYLEEPEKTQWNNVENLNRFERPMDDYEDLKMGMKFVSDEHYDENEDDLVSHVGDGSVISREWYV
5861	2051	1305	EVCACVQAFWLVAASSGDDDSQGGDKCCEVGSWVGSMR\VMARLLSEG\QGIPITACAFAQQPAG\BPRRGLAGVGEGGPQCSWVNRC TLEFLVSLLLGTDLARGRGNSASGPTAPADSKQL\ML*DVRVILE*RMNSGSPARDNAPSQRFCNLSEGLRFGISPSSWREALYGCHEVCA

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			A
5862	1556	483	PPFQLIMGEIKVSPDYNWFRGTVPLKKITVDDDSKTIWSLYDAG PRSIRCPLIFLPPVSGTADVFFRQILALTGWGYRVIALOYPVYD DHLEFCDFGRKLLDHLQLDKVHFLFGASLGGFLAQKFAEYTHKSP RVHSLLCNSFSFSDTSIFNOTWTANSFWLMPAFMLKKIVLGNFSS GPVDPMAMADAIDFMVRDLESLGQSELASRLTLNCQNSYVEPHKI RDIPVTIMDVFDQSLSTEAKEMYKLYPNARRAHLKGGNFPYLCRSAEVNLVYQIHL/R/RNSMEPNTRPLTHQWSVRSRSLRKALAASARRSSSVSLAVNDELTRCVLV*SVASAPVSRPEPSGSSGS PVLTVSGK
5863	2714	249	PPPSRGSLSLAAPREDTNGPLMVLFCILFLYEGIADSAPSCPQN VNISGGTFTLSHWAPGSSLTYSCPQGLYPSPASRLCKSSGQWQTPGATRSLSKAVCKPVRCRAPVSPFENGYTPTRLGSYPVGCGNVVSFECEDGFI\LRGSPVRQCRPNGMDGETAVCDNGAGHCPNPGLSLGP\VRTGPRFGHDGVRYRCSSNLVLTGSSERECQNGVWSGTEPICRQPYSYDFPEDVAPALGTSFSHMLGATNP\TQKTKESLRKI\QIQRSGHNLNYLLDCSOSVSENDFLFKESASLMVDRIFSFEINVSVAIITFASEPKVILMSVLNDNSRDMTEVISSLENANYKDHN\GTGTNTYAAALNSVYLMMNNQMRLLLGMETMAW\QEIRHAIILL\TDGK\SHMGSPKTAVDHIREILNNIQKRNDYLDIYAIGVGKLDV DWRELNELGSKKDGGERHAFILEQDTKALHQVFEHMLDVSKLTDTCGVGNMSANASDQERTPWHTIKEPKSQT\CRGALISDQWVLTAAHCFRDGNDHSLWRVNVGDPKSQNGKEFLIEKAVISPGBDVFAKKNQGIL\EFYGD\DIALL\KLAQKVKM\STHGCGPSCLP\CTM\BANIGFLRETFKGSTCR\DHENEL\WVNQGSV\PAHF\VAL\NGSKLEHLLTRMGVEWTSCRGSPKKTM\FENLT\DVRE\VVTD\QFL\CS\GPQEDESP\CK*E\SGGA\VFLEERRFLSAGGVWC SWGL\YNP\CLGSA\DKNSPKGPSVAKVPPPTR\DFHIN\LFPQ*SPWLQRHPGGMS*IFLPLLANGHLSFACPARICRPLHFLPS EWATLRTL
5864	173	1013	PLISVPQSLISLPPQPLLCFPGGQEPSAPSCLYSFLWACSFTMGLKPPSIPPSPLACVULKNLKPQLTPDLKPCKLIFFCNTAWPQYKLDNDNSK*PENGTEFESILOVLDNSCHKMGKWNSEPDVQAFF\S HWSLPSLCSQC\GLIPNLSSFSPFCFG\PPPQVPSP\TESFFSMDSSDLPPSPQAAPRQAEPGPNSHLASAPPYNPFITSPHTWS SLQFHVSITSPPPPQAQQFTLKKVAGAKGIVKVSAPFSLSQIR*RLGSFSSNIKIQPSSWLIWQQP
5865	568	1684	CLPGPWRGEGWRAIGHTVGCIFFKTAISHFKGGMYLCVCMCTCLSVVCVQVGSWICV\CVSMCACVSLCTC\ICRC1ISMYTREHACACTRV*VYMCMS\VCVCVSTCIDVRVCAHVCVYMCLCLGYA*ACTCV*MCVCMHEHVCMC\VCACSCVLL\CRGHICM/MCMSAYICI/CVYVCVLCVWACMRMSTCVWLVYG*ACTCVWMHM\CSCTCR/CVHVCMSMHACECLCVLHICCGCAGTRRWAGSARGSRSCSRCPCWAPGPGLSLPGPSCPVEQGLGGPGQQLQGRSGEARLGEHRWGSPAAVCSRNCVSPRRGADCFCFADPVPKQPPGGRASFEERGC GGRGWVCAPPLNGPQCCCSISKEPELKAKKKK
5866	98	3197	ARPEVPAPPALSLRRGAAKMGDKDDKDKDSPKKNKKGKERRDDDDLKKEVAMTEHKMSVEEVCRKYNTDCVQGLTHSKAQBIILDGPNALTPPPPTPEWVKFCRQLFFGFSIILWIGAILECPFLAYGIQAGTEDDPSGDNLYLGIVLAAVVIITGCFCSYYQEAKSSKIMESFKNMVPQQALVIREGEKMQVNAAEVVVGDLVIEKGGDRVPADLRIISAHCVKVDNSSLTGSEPEQPTRSPDCTHE\NPLKTRNITFFSNNFVEGTRGVVVATGDRVMGRIATLASGLEVKTPIAIBIEHFIQLITGVAVFLGVSSFFILSLILGYIWLEAVIFLIGIIIVANVPEGLLATTVTCLTLTAKRMARKNCILVKNLEAVETLGLSTSTICSDDKTGTLTQNRMTVAHMWFDNQIHEADTTEDQSGTSFDKSHTWVALF*H\LLGFCNRPVFKGGQDNIPVLKRDVAGDASESALLKCIELSSGSVKLMRERNKKVAEIPFNSTNKYVOLSIHETEPDNRYLLVMKGAPERILDRCSTILLQGKEQPLDEEMKEAFQNAYLELGGLGERVLGFCHYLPEEQFPKGFAFDCCDDVNFTTDNLFCVGLMSMIGPPRAAVPDAVGKCRSAIGKIVMTGDHPITAKAIAKGVGIIFEGNETVEDIARL

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			NIPVSQVNPRDAKCAVIHGTDLKDFTSEQIDELQNHTEVFARTSPQQKLIIVEGQCQRQGAIVAVTGDGVNDSPALKKADIGVAMGIAGSDVSKQAADMILLDDNFASIVTCVEEGRILIFDNLKKSIAYTLSNSIPEITPFLLPIMANIPLPLGTTILCIDLGTDMPAISLAYEAABSDIMKROPRNPTDKLVRNERLISMAYGQIGMIQALGGFFSYFVILAENGFLPGNLVGLRINWDRTVNDLDSYQQWVYBORKVVEFTCHTAFFVSVIVVVQWADLITICKTRRNNSFQQGMKNKILIFGLFETALAAFLSYCPGMDVALRMYPLKPSWWFCAPYSPFLIFVYDEIRKLILRRRNFGGWKEETY
5867	3	1485	LPGRRARGGRGCLGWPAPAQLDGSRMGAKVPAKRAPSSPVAKP GPVKTLTRKKNNKKRFWKSAREVSKKPASGPAGVVRPPKAPE DFSQNWKALQEWLKQKSQAPEKPLVISQMGSKKKPKLIQCNKK ETSPQVKGEEMPAGKDQEASRGSPSGSKMDRRAPVPRTKASGT EHNGKGTKEERTNGDIVPERGDIIEHKKRKAK\GQPQPHPPR/IDI WFDDVDPADIEAAIGPEAAKILARKQLGQSEGGSVSLSLVKEQAFG GLTRALALDCEMVGVPKGEEESMAARVSIVNQYGKCVYDKYVKP TEPVTDYRTAVSGIRPENLKQGEELEVQVKEVAEMLKGRILVGH ALHNDLKVLFLDHPKKKIRDITQKYKPFKSVKSGRPSLRLSEK ILGLQVQQAEMCSIQDAQAMRLYVMVKKEWESMARDDRPLLTAPDHCSDDA*QSCPAAAALPQRQCDQSQGQTSPQSGNSGETFS BSWQRGVANCY
5868	2122	833	LTAGASHTQDASQSTSAYPAAQNL/CVTNAMREDLADIWYIR AVTVYDKPASFFKETPLDLQHQLFMKLGSMHSPFRARSEPEDPV TERSAFTERDAGSGLVTRLRERPALLVSSTSWEDEDFSILLAA LESRV*T\MTLDGHNLPSSLVCVITGKGPLREYYSSRLIHQKFQH IQVCTPWLEADYPPLLLGSADLGVLCLHTSSGLDLPMKVVDMFG CCLPVCANFKCLHELVKHEENGLVFEDSEELAAQLQMLFSNFP DPAGKLNQFRKNLRESQQQLRWDESWVQTVLPLVMDT
5869	2122	833	LTAGASHTQDASQSTSAYPAAQNL/CVTNAMREDLADIWYIR AVTVYDKPASFFKETPLDLQHQLFMKLGSMHSPFRARSEPEDPV TERSAFTERDAGSGLVTRLRERPALLVSSTSWEDEDFSILLAA LESRV*T\MTLDGHNLPSSLVCVITGKGPLREYYSSRLIHQKFQH IQVCTPWLEADYPPLLLGSADLGVLCLHTSSGLDLPMKVVDMFG CCLPVCANFKCLHELVKHEENGLVFEDSEELAAQLQMLFSNFP DPAGKLNQFRKNLRESQQQLRWDESWVQTVLPLVMDT
5870	2122	833	LTAGASHTQDASQSTSAYPAAQNL/CVTNAMREDLADIWYIR AVTVYDKPASFFKETPLDLQHQLFMKLGSMHSPFRARSEPEDPV TERSAFTERDAGSGLVTRLRERPALLVSSTSWEDEDFSILLAA LESRV*T\MTLDGHNLPSSLVCVITGKGPLREYYSSRLIHQKFQH IQVCTPWLEADYPPLLLGSADLGVLCLHTSSGLDLPMKVVDMFG CCLPVCANFKCLHELVKHEENGLVFEDSEELAAQLQMLFSNFP DPAGKLNQFRKNLRESQQQLRWDESWVQTVLPLVMDT
5871	3	3465	FFFCCRPLRLYSKTTGDRSAMAGAACI.TAEVSWKVLERARTKRS VLKLI*LSLRRL*LEPTI*NGLLT*CSRLSVPFRLKV*/GSVYEP LKSTNLPRPDNETLWDKLDHYRYRIVKSTLLLQYQSPPTGLFPTKT CGGDKAKIQDLSYCAAGAWALALAYRRIDDKGRTHELEHSAIKCMRGILCYMRQADVKQQFKQDPRTTCLHSVFNVHTGDELLS YEYGYHLQINAVALYLYLVEMISSGLQIIYNTDEVSFIQNLFCV\ERVYRVP\DFG\WVGKREGKYY*/SGSTELHSSSVGLGKRQL*KQFNGFNLFGNQGCSWSVIFVQLDAHNRNRQTLCSLLPRESR SHNTDAALLPCISYPAFALDDEVLFQSTLDKVRKLGKYGFKR FLRDGYRTSLEDPNRCYYKPAEIKLFDGIECEFFPIFFLYMMIDGVFRGNPKOVQEYQDLLTPVLHHTTEGYPVVPKYYVPADFVEYE KNNPGSQKRFPSNCGRDGKLFWLWGQALYIIAKLLADELISPKDI DPVQRVPLKQDRNNSMRFSNQGPLENDLVVVHALIAESQLQVFLNTYGIQTOPTPOOEVPIQIWPQOELVVKAYLQLGICINEKLGSLGR PDRPFIGCLGTSKIRYLGKTVVCPYIIFDLSDFYMSQDVFLLID DIKNALOFIKQYWKMHRPLFLVIREDNIRGSRFNPILDMLAA LKKGIIGGVKVHVDRLOTLISGAVVEQLDFLRLISDTEELPEFKS FEELEPPKHSKVKRQSSTPSAELGQQPDVNISEWKDCKPTHEIL QKLNDSCSCLASQAIIIGLILLGILLKREGPNFITKEGTVSDHIERVYR

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			AGSQKLWSVVRRAASLLSKVVDLAPSITNVLVQGKQVTLGAFGHEEEEVISNPLSPRVIQNIIYKKCNTHDEREAVIQQELVIIHIGWIISNNPELFSGTLKIRIGWIHAMEYELQIRGGDKPALDLYQLSPSEVKQLLLDILQPQQNQRGCWLNRQIDGSLNRTPTGFYDRVWQILERTPNGIIVAGKHLPPQQPTLSDMTMYEMNFSLLVEDTLGNIDQFQYRQIVVVELLMVVSIVL3RNPELEFQDKVLDLRLVKEAFNEFQKDQSRLKEIEKQDDMTSFYNTPLGKRGTCSYLTAKAVMNLLLEGEVKPNNDPCLIS
5872	68	665	VQGYMYRFVIKINSCTYSEKTSICRHRCCPELPATQPWPPTPTVFFNIAIDSESLGCI\SFKLFADKV\PKRWKKNFVLLNTGKVLGDKGPCFYRIIPG\LCQGGDFTHHNGTGGKSLSKEFDDENF\I/LKH TAPGVLSTANAGPTTNGSQQFICTAKTEIG*QHVVFGKVKDGMSIVEALERSGSRNKGTSKSKITAANCQGL
5873	2240	506	RRPPEGGSGGRTRARMP\PSLALPLLSSWAGFGNAASARHHGLLASARQPGVCHYGTKLACCYGWRNNSKGVCATCEPGCKFGEVGPNKRCFPGYTGKTCSDVNECGMKPRPCQHRCVNTHGSYKCFCLSGHMLMPDATCVNSRTCAMINCYSCEDTEEGPQCLCPSSGLRLAPNGRCDCLDIDEASCAGKVICPYNRRCVNTFGSYCKCHIGFELQYISGRYDCIDINECTMDHTCSHHANCFTNQGSFKCKCQGYKGNGLRCSAIPENSVEKVLRAPGTIKDRIKLLLHKNSMKKKAKIKNVTPEPTRTPTPKVNLQPFNYBEIVSRGGNSHGG\KKGNEEKMKEGLEDEKREEALKD*HRRERPFRG\DVFFPKVNEAGEFGLIL\VRKALTSKLEHKADLNISVDCSFNHG\ICDW\KQDR\EDDFDW\NPADR\DNAT\GFY\MAVPGLWQGHK\KDIGRLKLLL PDLQPQSNFCLLFDYRLAGDKVGKLRVFKVNSNNALAWEKTSEDEKWKTGKIQLYQGTDATKSIIFEAERGKGTGEIAVDGVLLVSGLCPDSSLVDD
5874	2	3387	ACPRLARRRRRVRSLRRRGWLRARWSRGQNNAARRITQETFD AVLQEKAKEYHMDASGEAVSETLQFKAQDLLRAVPRSRAEMYDD VHSDGRYSLSGSVHSRDAGRESLRSDFSGFSFRSSNPSISDD SYFRKECGRDLEFSHSNSRDQVICHRLGHFRSQDWKFALRGSW EQDFGHPVSESSWSQEYSFGPSAVLGDFGSSRLIEKECLEKE\ SRDYDWDHSG\EA\DSVLRGS\SOVQA\RGRALNIVDQEGSSLGKGETQGLLTAKGGVGKLVTLRVNSTKKIPTVNRITPKTQGTNQIQKNTPSDVTILGTNPCTEDIQFPIQKIPPLGLDLKNLRLPRKMSFDIIDKSDVFSRFGIBIIKWAGFHZIKDDIKFSQLFOTLFELETETCAKMLASFKCSLKPEH RDFCFFTICKFLKHSALKTPRVDNEFLNMLLKGAVTKNCFFEIIPKFDKYIMRLQDRLLKSVTPLLMACNAYELSVKMKTNSPNUJALAETTNSLCRKSALLGQTFSLAS SFRQEKL*AVGLQDIAPSAAFPNFEDSTLFGREYIDHLKAWL VSSGCPLOVVKKABPEPMREEEKIMPPTKPEIQAQAPSSLSDAVPQRADHRVVGTTIDQLVKRVEIGSLSPKERTLLKEDPAYWFSLDEN SLEYKKYKLKLAEMQRMSENLRGADQKPTSADCRAVRLMSRAVRNLKKLLP\WQRGLLRAQGV\WKAARRATTGTQTLFLRAPGLKHGRQAPGLS\OAKPSLDRND\AAKDN\CP LDGV\GPSPQDPSEASGPSPKPAVGVDISEAPQTSSPCPSADIMKDNGRTAEKLARFVAQVG\PEIEQF\SI\ENSTDNPDLWFL\HDQNSS\AFKFY\RKVFELCPSICFTSSPHN\IHTGGDTT\GSQESPVDLME GEA\FEDEPPP\PREAELSPPEVMPMEEDEDDEDGEEAPA\PGRG GPSLEGSTPADGLPGEA\AEDDL\ALGAPALFTGLLQVTCPFFRGFSSKSLKVGMIIFAPKRVCLIQEPKVHEPVRIAYDRPRGRPMSSKKKPKDLDFAQQKL\TDK\NLGFO\MLOKMGWKEGHGLGSLGKGIR\SRSACTQQAAWGSGWGLSPSTCSLPLGSFTAkmayswql\IFVF
5875	296	1848	LAALGGPLWRLSRGFRREYLGLSAPSALCGAMRSVSYVQRALEFGSGLFPHAICLGDVDNDTLMELVVGDTSGKVSVYKNDNSRPWLTCSQCQMLTCVGVDVCNKGNKLVAVSAEGWFHLDLTPAKVLDASGHHETLIGEERQRPVFKOHIPANTKVM LISDIDGDGCRELVVGYTDRVVRARWEELGEGPEHLTGQLVSLKKWMLLEGQVDSLSTVLGPLGLPELMVSPQPGCAYAILLCTWKKDGTGSPASEGPTDGS/SGDPSCP RRGAAPDIWPYPQOECIHLSPNWQHQT\SHGTESSGS

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			GLFALCTLDGTLKLMEEEMEADKLLWSVQVDHQLFALEKLDVTGNGHEEVVACAWDGTYIIDHNRTVVVFQVDENIRAFCAGLYACKRGRNNSPCLVYVTNFNQKIVYVYWEVQLERMESTNLVKLLETKP\STTACCRSWAIIITSL*LVPCTKRSTIQTSHSVPQASRIPPSWTCLIAEGFF*TPTLPPKGVFGSHCAAAGSITKQ
5876	1122	224	HLPLGVPSKVAGAAAMEPQEERETQVAWILKKIFGDHP\TQYEVNPRTTEILHHLSERNVRDVTYVLDKQKASEYESEAKYLQDLLMESVNFS PANLS STGSRYLNALVDSVALETKDTSLASFIPAVNDLTSDFLRTKSKSSEEIKIELEKLEKNLTATLVLEKCLQEDVKKAELHLSTER\AKVDNRQRQNM\DFLKAKSEEFREGIQAAGEQLSARGQ\DAFSVPIQSLVALIRENWPRLKQQTIPK\KKLESYLDLMP\N\PSHCSK\RIEBAK\RELA\SIEABLRRVS\MMEL
5877	2030	1907	GTLGKMAASSSGEKEKERLGGGLGVAGGNSTRERLLSALEDLEVLSRELIELMAlAISRNQKLLQAGEENQVLELLIHRDGEFQELMKLAQNQGIHHHEMQVLEKEVEKRSDSDIQQQLQKOLKEAEQILATAVYQAKEKLKSIEKARKGAISSEEIIKYAHRIASNAVCAPLTWPGDPRRPYPTDLEMRSGLLGQMNNPSTNGVNCHLPGDALA/RRKIARCPCTSVS\NGSQMTCR*INIILILQKSVCEL
5878	950	2113	GLWKCMQLQGPHTHRVQP\PTPRQQGPQ\VPVAVIAGNRPNLYRMLRSLLSAGVSPQMITVFDGYEEPMDVVALFGLRGQIHTPISIKNARVSQHYKASLTATFNLPEAKFAVLEEDDLIAVDFFSFLSQSIHLLLEEDDSLYCISAWNDQGYEHTAEDPALLYRVETMPGLGWVLRRSLYKEELEPKWPTPEKLWDWDMWMRMPEQRRGRECII PDVSRSSYHFGIVGLNMNGYFHEAYFKKHFKNTVPGVCLRNVDSLKKEAYEVFVRLLSAEVLDHSKNPCEDSFLPDTEGHTYVAFIRMEKDDDFTTWTQLAKCLHIWDLDRVRGNHRLWRLFRKKNNHFLVVGVPASPYSVKKPPSVTPIFLEPPPKEEGAPGAPEQT
5879	3	981	RLTEAAAAGSGSRAAGWAGSPTTLLPLSPTSPRCAATMASSDEDGTNGGASEAGEDREAPGKRRRLGFATLAWLTFYDIAMTAGWLVLATAMVRFYMEKGTHRLGLYKSIQKTLKFQFTALLETVHCLIGIVPTSVITGVQVSSRIFMVWLITHIKPIQNEESVVLFLVAVWTETITRYSFTFSLLDHLPYFIKWARVNFFIILYPVGVAGEELTYAALPHVKKITGMFSIRLPNKYNVSFDDYYFLITMASYIPLFPQLYFHMLRQRRKVHLHG\G*L*KRMIK\SLQTRcffQNNQDYLSPSFNNKNQKLCIEISIWVFLKI
5880	1138	1324	SLWCLVAGGLGLGPSSCNPLQRAGILARPREEAGTFSALTACSA SVTSKGKSSSGMWPSAASDRDSPVLRPPGPVQLPSGTGWVLSD *KKKRGRCSS\WLSQPQHEREKEVVLRLRSMAEGERARAASDVL CRSLANETHQLRRTLJATAHMCQHAKCLDERQHAQRNVGERSPDQSEHDTGHTSVQSIVIEKLQEEENRLLKQKVTHVEDLNAKQWQRYN ASRDEYVRLHAQLRGLQIPEHEPELMRKEISRLNRQLEEKINDCAEVKQELAASRTARDAALERVQMLEQQTLAYKDDFMSERADRER AQSRIQELEEKVASSLHQVSWRQDSREPDAGRIGHAGSKTAKYLAADALELMVPGGWRPGTGSQQPEPPAEGGHPGAAQRGQGDLQCPHCLOQCFSDEQGEELLRHVAECQ
5881	26	441	GGIHPSPTEAPRQHILTMDCWTWILFLVAAATGTHAQVQLIQSGSEVKPGASVMVSCYVSGYTLTKLMSMHWVRQAPGKGL*MGPFDLQDVETIYPQKFQGRVSMTEETSTETQ/AYLELSSLRSEDTVHHCATDTV
5882	2407	2216	SGCVELYSHSLEYNPEWISVQSAVAPAQLALNSDGDL*LHSGERTRRD*QLPEAGGPGQLQEPLOLQGELDITSDEFILDEVDG\VDLRHYSKQVELELQQIJEQKSIRDY\IQESENIASLHNQITACDAVLERMEQMLGAFQSDLSSISSEIRTLQEQSGAMNIRLRNRQAVRGKLGELVDGLVVPSSALVTAILEAPVTEPRFLEQLQELDAKAAVREQEARGTAACADVGRGVLDRLRVKAVTKIRBFILQKIIYSFRKPMNTNYQIPQTLALKYRFFYQFLLGNERATAKEIRDEYVETLSKIYLSYRSYLGRMLMKVQYEEVAEKKDLMGVDTAKKGFFSKPLRSRNTIFTLGTRGSVISPTBLEAPILVPH\TAQNGEQRYPFEALFRSQHYALLDNSCREYLFIGEFFVVSGPAAHDLFHVAMGRTLSMTLKHLDSYLADCYDAIAVFLCIHIVLFRNIAAKRDVPALDRYWEQVLALLW

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			PRFELILEMNVQSVRSTDTPQLGGLDTRPHYITRRYAEFSSALV SINQTIIPNERTMQLLQLQVEVENFVLRLVAAEFSRKEQLVFLI NNYDMMLGVLME*ERAADDSKEVESFQQLLNARTQEFIGEELLSS PPFGGLVAFVKEAFALIBRGQAERLRGEEARVTQLIRGFGSWK SSVESLSQDVMSRTNFNRNGTSIIQGALTQLIQ\LYHRFHRV\L SQPQIRALPARAEILINIHMLMVELKKHKPNF
5883	2	1374	EFPGRFRFRAVMEEAGAGAGAAGWSCPAGPPTVTTLGSYEASEG CERKKQRWGSLERRGMQAMEGEVLLPALYEEEEEEREEEEEEVE EEEEQVQKGGSGVGSLSVNKHRLGLSLTETEELRAQVLQLVAEL EETRELAGQHEDDSLELQGLLEDERLASAQQAEVFTKQIQQLQG ELRSLSREEISLLEHEKESELKEIEQELHLAQAELQSLRQAAEDS ATEHESDIAASLQEDLCRMQNELEDMERIRGDYEMEIASLRAEME MKSSEPSGSGSLGSDYSGLQEEQLERERYHFLNBEYRALQESNS SLTCQLADLESERTORATERWLQSQTLSMTSAESQTSEMDFLEP DPEMQLLRQQLRDAEQMHGMKNCQELCCELELOQHHRQSEE EQRRLQRELKCAQNEVLRFQTSHS\SPSHPLPIPPSSPCLL*A LVVISALLWCNWAEATSS
5884	4261	2522	GVALARASARLRLVLTGVRACAEPEVGAEPAKAVAGAAEPDEDGGR SRLRDCGDYTPSERLGPKGAMLWFQGAIPAAIATAKRSGAVFVV FVAGDDEQSTQMASTQWEADDKVTEASSNSFVAIKIDTKSEACLQF SQIYPVVCPSSFFIGDSGIPLEVIAGSVSADELVTRIHKVRQM HLLKSETSVANGSQSESSVSTPSASFEPNNTCENSQRNAAELCE IPSTSDTKSDITATGGESAGHATSSQEPSCGSDQRPAEDLNIRVE RLTKKLEERREEKRKEEEEQRRIKKEIERRKTGKEMLDYKRKQEE ELTKRMLBURNREKAERAKRQJALDRAERAARFAKTKE EVEAAKAAALLAKQAEVMEVKRESYARERSTVARIQFRLPDGSSF TMQFPSDAPLEEARQFAAQTVGNTYGNFSLATMFPRREFKEDY KKKLLDLEAPSASVLLP\ALFINF*AGRPTASIVHSSSGDIW TLLGTVLVLPFLAIWRLISNFNFSNPPPTQTSVRVTSSSEPPNPAS SSKSEKREPVRKRVLBKRGGDFKKEGKIYRLRTQDDGEDENNTW NGNSTQQM
5885	900	467	AAGGGRRRSRLSRSPWTGPSKSPSGVRCCG\RR\AWEDKDEFLDV IYWFRQIIAVVLLGVIWGVPLRLRGFLGIAGFCLINAGVLYLYFSN YLQIDEEYGGTWELTKEGFMTSFA/IVHGCHLDHLLHCHPL*LM VYSSQVLPISQSKGPs
5886	86	1341	PFRGRALTLKKQPRPGVAPPSSLGTCHKSDPGRPAAQSOPPSPGS GTFGLLSFRMRVTKTWTLKKHFVGYPNTNSDFELKTSSELPLPKNG EVLLKEFLTVDPYMRVAAKRLKEGDTMMGQQVAKVVESKNVAL PKGTVILASPWTTHSIDGKDLEKLITEWPDTIPLSLALGTVG MPGLTAYFGLLEICGVKGGETVMVNAAGAVGSVVGQIAKLKGC KUVGAVGSDEKVALQKLGFDVFNKYTVESLEETLKKASPDGY DCYFDNVGGEFSNTVIGOMKKFGRIAICGAISTYNRTGPLPPGP PPEIGIYQELRMEAFLVYRQOGDARQALKDLLKWLELPYFVI D*LQANTLVYKSMKSAKPSLEYISEKLVSG\KIQYKEYIIEGFE NMPPAFAFMGLKGDNLGKTIVK
5887	1937	104	APGCRGCRATRCPCRGPRWDSDLGDEAARSAPAEGGAPGLLGLRE RPDRCHPGGDDDRGPQLHRSPPG/SPSELSRRPGPPGLPGLOGPP PAPGLPQSRTL/PVLCVCDLSPAQCDCINCCCDPDCSSVDFSVFS ACSVPVVTGDSQFCSQKAVIYSLNFTANPPQRVFELVDQINPSI FCIHTN*NLHYPLLQKYL\NENNFDTLMKTSQGFTLNAESY VSFTTKLDIPTAAKYEGVPLQTSDSLRFPSSSLTSSLCTDNNP AAFLVNQAVKCTRKTNLEQCEEIEALSMAYFSSPBILRVPDSRK KVPITVQSIVIQLNKTLTREEDTDVLQPTLVNAGHFSCLCVNV LEVKSLSLTYTDAGEVTKADLSFVLGTVSSVVVPLQQKFEIHFLQ ENTQPVPLSGNPGYVVGPLAAGFQPHKGSGIIQTTNRYQQLTI LHSTTEQDCLALEGVRTPVLFQYTMOSGCKLRLTGALPCQIVAQ KVKSLLWGQGFPDYVAPFGNSQGP/ADMLEDWVPIHFITQSENRK DSCQLPGALVIEVKWTKYGSLLNPQAKIVNVTANLISSFPBAN SGNERTILISTAVTFVDVSAPEAGFRAPPAINARLPFNFFFV

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SEQ ID NO:	Predicted beginning nucleotide location corresponding to first amino acid residue of amino acid sequence	Predicted end nucleotide location corresponding to first amino acid residue of amino acid sequence	Amino acid segment containing signal peptide (A=Alanine, C=Cysteine, D=Aspartic Acid, E=Glutamic Acid, F=Phenylalanine, G=Glycine, H=Histidine, I=Isoleucine, K=Lysine, L=Leucine, M=Methionine, N=Asparagine, P=Proline, Q=Glutamine, R=Arginine, S=Serine, T=Threonine, V=Valine, W=Tryptophan, Y=Tyrosine, X=Unknown, *=Stop Codon, /=possible nucleotide deletion, \=possible nucleotide insertion)
5888	375	2302	LLCRTPGVAMQRADSEQPSKRPRCDDSPRTPSNTPSAEADWSPG LELHPDYKTWGPEQVCSFLRRGGFEPVULLKNIRENEITGALLP CLDESRFENLGVSSEGERKKLILSYIQRLVQIHVDTMKVINDPIH GHIELHPPLLVRRIIDTPQFQRLRYIKQLGGGGYVFPGASHNRFEH SLGVGYLAGCLVHALGEKQPELQISERDVLCVQIAGLCHDLGHG PFSIMFDGRFIPARPEVKWTHFQGSVMMFEHLINSNGIKPVME QYGLIPEEDICPTIKEQIVGPESPVEDSLWPKGRPENKSFYVE IVSNKRNGIDVDKWDYFARDCHHLGIQNNFDYKRFIKFARVCEV DNEBLRICARDKEVGNLYDMFHTRNSLHRRAYQHKVGNIIDTMIT DAFLKADDYIEITGAGGKKYRISTAIDDMEAYT'KLTDNIFLEIL YSTDPKLKDAREILKQIEYRNLFKVYGETQPTGQIKIKREDYES LPKEVASAKPKVLDVVKLKAEDFIVDVINMDYGMQEKNPIDHVS FYCKTAPNRAIRITKNQVSQLLP\EKFAEQ\LRVYCKVDRKS LYA\AROYFVQW\CADR\NFT\KPQDGRCY\PPTP*HPQKKGW\NDSTFSPKIPTRLPRRLPKSRV\QLFKDDPM
5889	1831	731	LPAACGRPVTAAPQAEPEGRSGRPRDLDPPYPPQVFPPRPDRVAI VTGGTDGIGYSTAKHLARLGHMVIIAGNNNDKAKQVVSKIKBET LNDKET*VLLCCPGWLCLWNSSDPPTSASRGAGTTGVHHHFLLK FGIFIL\DLASMTSIRQFVQKFMMKKIPLHVLINNAGVMVPQR KTRDGFEEHFGLNLYLGHFLLTNLLDTLKGESGSPGHSARVVIVS SATHYVAELNMDDLQSSACYSYSPAAYAQSKIALVLFTYHILQRL AAEGSHVTANVVDPGVVNTDLYKHFWATRLAKLLGWLLFKTP DEGAWTSIYAAVTPPELEGVGCCRGLYNKKETKSLHVTYNQKLQQQ LWSKSCEMTGVL
5890	1322	200	FRRGWSAAGRRAVPAFCRSRISASSPERRPRGAVERLQSGTEAACRS GRPDPRPASAAGGHAGERMSQRDTLVHLFAGGCAGGTVGAILTCP LEVVKTRLQSSSVTLYISEVQLNTMAGASVNRRVSPGPLHCLKV ILEKEGPRSLFRGLGPNLVGVAPSRAIYFAAYSNCKEKLNDVFD PDSTQVHMSAAMAGFTAITATNPPIWLKTRLQL*/SQTAGKR RMGAFECVRKVYQTDLGKGFYRGMSASYAGISETVIHFVYESI KQKLEYKTASTMENDEEVKEASFVGMMMLAAATSK\LVATTI AYPHEVVRTRLREEGTKYRSFFQTLSSLVQEETYGSLSYRGLTTH LVRQIP\NTAIMMATYELVVYLNG
5891	1322	200	FRRGWSAAGRRAVPAFCRSRISASSPERRPRGAVERLQSGTEAACRS GRPDPRPASAAGGHAGERMSQRDTLVHLFAGGCAGGTVGAILTCP LEVVKTRLQSSSVTLYISEVOLNTMAGASVNRRVSPGPLHCLKV ILEKEGPRSLFRGLGPNLVGVAPSRAIYFAAYSNCKEKLNDVFD PDSTQVHMSAAMAGFTAITATNPPIWLKTRLQL*/SQTAGKR RMGAFECVRKVYQTDLGKGFYRGMSASYAGISETVIHFVYESI KQKLEYKTASTMENDEEVKEASFVGMMMLAAATSK\LVATTI AYPHEVVRTRLREEGTKYRSFFQTLSSLVQEETYGSLSYRGLTTH LVRQIP\NTAIMMATYELVVYLNG
5892	1764	379	VVLRVCRLSVNSAVSSRTGGWSAGLTCAMQRLOVVLGHLRGPA DSCGWMQPAAAPCLSGAPHASAADVVVVHGRTTAICRAGRGFKDT TPDELLSAVMTAVLKDVNLRPEQLGDIICVGNVLQPGAGAIMARI AQFLSDTIPETVPLSTVNRCQSSGLQAVAS\AGGIRNGSYDINGMA CGVESMSLADRGNPGNITSRLMEKEKARDCLIPMGITSENVAER FGISREKQDTFALASQQKAARAQSKGCFQAEIVPVTTTVHDDKG TKRSITVTQDEGIRPSTMMEGLAKLPFKDGSTTAGNSSQVS DGAAAILLARRSKAEEELGLPILGVRLRSYAVVGVPPDIMGIGPAY AIPVALQKAGLTVSDVDFEINE\AFASQAAYCVELRLPP*EG *TPLGGASGP*GHPPLGLHNGHVQVITLAQ*S*SARGKRAYRSGC PCAIGSWNGSPLPVFEPWGT
5893	3	1653	ILSKRRCQKAKTKELMAKKVAVIGAGVSGLISLXCCVDEGLEPT CFERTEDIGGVWRFKENVEDGRASIYQSVVTNTSKEMSCFSDFP MPEDFPNFLHNSKLLYEFRFAKKFDLLKYIQFQITVLSVRKCP DFSSSGQWKVVTQSGNGKEQSAVFDAMVVCSGHHILPHIPLKSFP GMERFKQYFHSRQYKHPDGFEKGKRLVIGMGNLGSIDAVELSK NAAQVFIISTRHGTWMSRISEDGYPWDSVFHTFRSMLRNVLPR TAVKWMIEQQMNRWFNMHENYCLEPQNKYIMKEPVLNDDVPSRLL CGAIKVKSTVKELTETSAIFEDGTVEENIDVIIIFATGYSFSFPP

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			LEDSLKVVENNMVSLYKYIFPAHLKDSTLACIGLIQPLGSIFPT AELQARWVTRVFKGLCSLPSERTMMMDIIKRNEKRIDLFGESQS QTLQTNYVDYLDLDELAIEGAKPDFCSLLFKDPKLAVRLYFGPCN SY*YRLVPGPGQWEGARNIAFTQKQRILKPLKTRALKDSSNFSVS FLLKILGLLAVVVAFF\COLQS
5894	174	1673	RYSPPKKVLQNKESSLKLGAMATAALVSAHSLAPLNLLKEGLRVRE DHYSTWEQGFKLQGNSKGGLQPLCKQFRQLRYEETTGPREALS RLRELCCQQWLQPFHTKHEHILLELLVLEQFLILIPKELQARVQEHP HPESEDVVVLEDLQLDLGETGQQVDPDQPKKQKILVVEEAMPL KGVOEQQVRRHECEVTKPEKEKEGEETRIENGKLVVTDSCGRVES SGKISEPMEAHNGSNLERHQAKPKEKIBYKCSEREQRFIQHLD LIEHASTHTGKKLCESDVCOSSSLTGHKKVLS*ERKVHQCHGV LGKAFCQRSSHLLVRHQKIHLGEKPYQCNECGKVFSQNAGLEHLR IHTGEKPYLCLTHGKNFRRSSHLLNRHQRIHSQEEPCBECKGKT FSQALLLTHHQRISHSKSHQCNECGKAFPSLTSIDLHRIHRIHTG EKPKKCNICQKAFRLNSHLAQHVRIHNEEKPYQCSECGEAFRQR SGLFQHQHQRYHHKKDKLA
5895	2967	86	HPSLLGAIPFYPPSSPWPPPLYLFWNSHRKSRHFINQRGIHGE MRLFVSDGVPGCLPVLAAGRARGRAEVLISTVGPEDCVVPFLT RPKVPLQLDSGNLFSTSACRYFF\LLSGWEQDDLTNWQLEW EATELQPTLSAALYYL\VVQGKKG\EDVLGSVRRTLTHIDHSLSRQ\NCPFLAGETESLADIVLWGALYPLLQDPAYLPPEELSALHSLWFQTLSQ\EPCQR\ARRLVLVKQ\QGVLALR\PYLQKQPQSPA EGKGLSPIEPEEEELATLSEEIAMAVENTAWEKGLESLPPLRPQQ NPVLPVAGERNVLITSALPVNNVPHLGNIIGCVLSADVFA RYSRLRQWNTLYLCGTDEYGTATETKAL\EEGLTPQEICDKYHIIHA DIY\RWFNISFDIFGRTTTPQQ\TKIT\QDIFQQLLKRGFVLDQD TVEQLRCEHCARF\LADRFBEGVCPFCGYEEARGDQCDKCGKLI NAVELKKPQCKVCRSCPVQSSQHFLDLPLKLEKRLEEWLGR TLPGSDWTPNAQFITPFFGFRWPSKPRWQ*TRDLK\WGNPGTP*EGFEDK\VFYVWFDAТИGILSITANYTDQWERWW\KNPEQVLDYQ FM\AKDNVPFHSLVFPSSALGAEDNYTL\VSHLIATEYLNEYEDG K\FSKSRGVGVFRDM\AHDTGIPPDISRFYL\LYIRPEGK\DSA FSWTDLLLKNNS\ELLNNLGNFINRA\GMFVSKFFGG\YVPEMV LTPDDQRLLA\HVTLELQHYHQ\LEKVRIRDALRSILTIS\RH GNQYI\QVNEPW\KRIKGSEADRQRAFTVGLAVNIAALLSVML QPYMPTVSATIQAQLQLPPPACSILLTNFLCLTPAGHQIGTVSP LFQKLENDQIESLRQRPGGGQAKTSPKPAVVEVTTAKPQQIQA LMDEVTKQGNIVRELKAQKADKNEVAEVAKLLDLKKQLAVAEG KPPEAPKGKKK
5896	2967	86	HPSLLGAIPFYPPSSPWPPPLYLFWNSHRKSRHFINQRGIHGE MRLFVSDGVPGCLPVLAAGRARGRAEVLISTVGPEDCVVPFLT RPKVPLQLDSGNLFSTSACRYFF\LLSGWEQDDLTNWQLEW EATELQPTLSAALYYL\VVQGKKG\EDVLGSVRRTLTHIDHSLSRQ\NCPFLAGETESLADIVLWGALYPLLQDPAYLPPEELSALHSLWFQTLSQ\EPCQR\ARRLVLVKQ\QGVLALR\PYLQKQPQSPA EGKGLSPIEPEEEELATLSEEIAMAVENTAWEKGLESLPPLRPQQ NPVLPVAGERNVLITSALPVNNVPHLGNIIGCVLSADVFA RYSRLRQWNTLYLCGTDEYGTATETKAL\EEGLTPQEICDKYHIIHA DIY\RWFNISFDIFGRTTTPQQ\TKIT\QDIFQQLLKRGFVLDQD TVEQLRCEHCARF\LADRFBEGVCPFCGYEEARGDQCDKCGKLI NAVELKKPQCKVCRSCPVQSSQHFLDLPLKLEKRLEEWLGR TLPGSDWTPNAQFITPFFGFRWPSKPRWQ*TRDLK\WGNPGTP*EGFEDK\VFYVWFDAТИGILSITANYTDQWERWW\KNPEQVLDYQ FM\AKDNVPFHSLVFPSSALGAEDNYTL\VSHLIATEYLNEYEDG K\FSKSRGVGVFRDM\AHDTGIPPDISRFYL\LYIRPEGK\DSA FSWTDLLLKNNS\ELLNNLGNFINRA\GMFVSKFFGG\YVPEMV LTPDDQRLLA\HVTLELQHYHQ\LEKVRIRDALRSILTIS\RH GNQYI\QVNEPW\KRIKGSEADRQRAFTVGLAVNIAALLSVML QPYMPTVSATIQAQLQLPPPACSILLTNFLCLTPAGHQIGTVSP LFQKLENDQIESLRQRPGGGQAKTSPKPAVVEVTTAKPQQIQA

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			LMDDEVTKQGNIVRELKAQKADKNEAAEVAKLLEDDKKQLAVAEKGKPPEAPKGKKK
5897	2967	86	HPSLLGAIPFYPFPSSWPWPLYLFWNSHRKSRHFINQRGIHGE MRLFVSDGVPGLPVLAAGRARGRAEVLISTVGPEDCVVPFLT RPKPVPLQLDGSNYLFSTSAICRYFF\LLSGWEQDDLTNQWLEW EATELQPTLSAALYLY\VVQGKKG\EDVLGSVRRTLTHIDHSLS RQ\NCPFLAGETSLADIVLGALYPLLQDPAYLPPEELSALHSW FQTLSQ\EPQCQ\AARRLVLKQ\QGVLAIR\PYLQKQPQSPA EGKGKLSPIEPEEEELATLSEEIAMAVENTAWEKGLESLPPLRPQQ NPVLVAGERNVLITSALPYVNPNVPHLGNIIIGCVLSADVARYS RLRQWNTLYLCGTDEYGTATEKAL\EEGLTPQEICDKYHIIHA DIY\RWFNISFDIFGRRTTPQQ\TKIT\QDIFOQLLKRGFVLQD TVEQLRCEHCARF\LADRVEVGVCFCGYEEARGDQCDKGKLI NAVELKKPQCKVCRSCPVVQSSOHLFLDLPKLEKRLEEWLRTL PGSDWTPNAQFITPFFGFREWPSKPRWQ*TRDLK\WGNPGTP*E GFEDK\VFYVWFATIGYSITANYTDQWERWW\KNPEQVDLYQ FM\AKDNVPFHSIVFPSSALGAEDNYTL\VSHTIATEYLNEYDG K\FSKSRGVGVFRDM\AHDTGIPPDISRFYL\LYIRPEGK\DSA FSWTDLLLKNNS\ELLNNLGNFINRA\GMFVSKFFGG\YVPEMV LTPDDQRLLA\HVTLELQHYHQ\ILLEKVRIRDALRSILTIS\RH GNQYI\QVNEPW\KRIKGSEADQRQAGTVTGLAVNIAALLSVML QPYMPTVSATIQAQLQLPBPACSIILTNFLCTLPAGHQIGTVSP LFQKLENDQIESLRQRFGGGQAKTSPKPAVVEVTTAKPQQIQA LMDEVTKQGNIVRELKAQKADKNEAAEVAKLLEDDKKQLAVAEKGKPPEAPKGKKK
5898	2967	86	HPSLLGAIPFYPFPSSWPWPLYLFWNSHRKSRHFINQRGIHGE MRLFVSDGVPGLPVLAAGRARGRAEVLISTVGPEDCVVPFLT RPKPVPLQLDGSNYLFSTSAICRYFF\LLSGWEQDDLTNQWLEW EATELQPTLSAALYLY\VVQGKKG\EDVLGSVRRTLTHIDHSLS RQ\NCPFLAGETSLADIVLGALYPLLQDPAYLPPEELSALHSW FQTLSQ\EPQCQ\AARRLVLKQ\QGVLAIR\PYLQKQPQSPA EGKGKLSPIEPEEEELATLSEEIAMAVENTAWEKGLESLPPLRPQQ NPVLVAGERNVLITSALPYVNPNVPHLGNIIIGCVLSADVARYS RLRQWNTLYLCGTDEYGTATEKAL\EEGLTPQEICDKYHIIHA DIY\RWFNISFDIFGRRTTPQQ\TKIT\QDIFOQLLKRGFVLQD TVEQLRCEHCARF\LADRVEVGVCFCGYEEARGDQCDKGKLI NAVELKKPQCKVCRSCPQVQSSQHFLDLPKLEKRLEEWLRTL PGSDWTPNAQFITPFFGFREWPSKPRWQ*TRDLK\WGNPGTP*E GFEDK\VFYVWFATIGYSITANYTDQWERWW\KNPEQVDLYQ FM\AKDNVPFHSIVFPSSALGAEDNYTL\VSHTIATEYLNEYDG K\FSKSRGVGVFRDM\AHDTGIPPDISRFYL\LYIRPEGK\DSA FSWTDLLLKNNS\ELLNNLGNFINRA\GMFVSKFFGG\YVPEMV LTPDDQRLLA\HVTLELQHYHQ\ILLEKVRIRDALRSILTIS\RH GNQYI\QVNEPW\KRIKGSEADQRQAGTVTGLAVNIAALLSVML QPYMPTVSATIQAQLQLPBPACSIILTNFLCTLPAGHQIGTVSP LFQKLENDQIESLRQRFGGGQAKTSPKPAVVEVTTAKPQQIQA LMDEVTKQGNIVRELKAQKADKNEAAEVAKLLEDDKKQLAVAEKGKPPEAPKGKKK
5899	326	1078	NCPKSKEPNCVRAPSLSPLS2LRAAMALSVDVVKQIKHMMAFIEQ EANEKAEEIDAKAEEEFNIEKGRLVQTQRLKIMEYYEKKEQIE QQKKILMSTMNRQARLKVLRARNDLISDLSEAKLRLSIVEDP EVYQGLLDKLVLCGLLRL\EPVMIVRCRF\QDLLLVEAVOKAI PEYMTISQKHVEV\QIDKEA*LAVECSWEVWEVYSGNQR1KVSNTLESRLDLSAKQKMPEIRMALFGANTNRKFPI
5900	64	1409	KAAASRDSPCLEFTCFLCGVSSHDLQHCRMWYHRLSHLHSRLQDLLK GGVYIPALPQPNFKSSLPLAVWHHHTASKSILTCAWQQHEDHFEL KYANTVMRFDYVWLDRDHCRSASCYNSXTHQRSLDTASVDLICIKP KTIRLDETTLFFTIWPDGHVTKYDNLWLVKNSYEGQKQKVJOPRI LWNAEIYQQAQVPSVDCQSFLNEGLKKFLQNFLLYGIAFVEN VPPTQEHTEKLAEIRISLIRETIYGRMWYFTSDFSRGDTAYTCKLA LDRHTDTTYFQEPCGIQVFHCLKHEGTGCRLLVDGFYAAEQVL

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			QKAPEEFELLSKSAI\KHEYIEDVGECHQPHDWDWAQS*ISTHG /YKELYLIRYNNYDRAVINTVPYDVVHWRWYTAHRTLTIELRRPE NEFWVKLKPGRVLFDNWRVHLGRCFTGYRQLCCYLTRDDVL NTARLLGLQA
5901	1	2121	VAIEQTSLKMMQAVGGAPARTGEYIICNCQCGAKYTSLSDFQTHL KT\LDTLPKLTCPQCNKEFPNQESLLKHVTIHFMITSTYYICE SCDKOFTSVDDLOKHLLDMHTFVFFRCTLCQRVFDSKVSQIQLHL \AVKHSNEKKVYRCTSCNWDFRNETDLQLHVKNHNHLENQGKVKH CIPCGESFGTEVLQCHITTHSKYKNCKFCSKAFAHILLPEVKHL REKHCVFETKTPNGCTNGASEQVOKEEVELQ\LLTNSQESHINSH DGSEEDVDTSEPMYGCDICGAAYTMETLLQNQHQLRDHNIRPGES AIVKKKAELIKGNYKCNVCSCRTFFSENGLRE\IMQTHLGPVKHYM CPICTGERFPSLITLLEHKVTTHSKSLDTGNCRICKMPLQSEEFL EHCMHPDLRNSLTGFRCVVCMQTVTSTLEKIHGTMHMQKGTN GSAVQTTGRGQHVKLYKCASCLKEFRSKQDVLKLDINGLPYGL CACCVNLSKSASPGINVPPGTNR\PLGQNEENLSSAIEGKGKVCGL KTRCS*LATFKF*VLIKVELPEPHPKPFHRGVSRPDSNSTQLKTP QVSMPMRISPSQSDEKKTYQC1KQMVFYNEWEDIQVHVANHMID EGLNHECKLCSQTFDSPAHLQCHLIEHSFEGMGGTFKCPVCFTV FVQANKLQQHIFPSAHGQEDKIYDCTQCPQKFFFQTELQNHTMTQ HSS
5902	712	209	LKNRRRSRPSIRCSIGSTSRSVSRWLTSFTYLDHTADVQ*V*REF IPLKPRQ*ED*MFQSWLHAWGDTLEEAEFBQCAMAMFGYMTDTGT VEPLQTVEVETQGDDLQSLLFHFLDEWLYKFSADEEFFP\GWGE EFSLSKHPQGTIVKAITYSAMQVYNEENPFEVFIIDI
5903	2106	735	DTPGSPSLPSTTAPFSLRSLSFFSRPSYLLPGDPQPLQGRGLPTT PALFALSAPVPGAAASPMPGSLRLRPLLPLLLVLLVLTGPRPAA GLSTCKTIDMELVVKRKRIEARIQGILSKLRLASPPSGEVPPG LPEAVLALYNSTRDRVAGESAEPPEPEPEADYAKEVTRVLMVET HNEIYDKFKQSTHSIYMFNTSELREAVPEPVLLSRAELRLLRL KLKEVQHVELYQKYSNNNSWRVLYSNRLLAPSPEWLSFDVITGVV RQWLSRGGEIEGFRLSAHCSCDSDRNTLQVDINGFTTGRR\RGDL ATIHGMNRPFLLMATPLER\QHQLQS\SRHQAL\DTNY\CFSF HGRNRNCLRC\VHC*HLIFRKDL\GW\xWI\HE\PKGYHANFC\L GCPCPYIWELDTONSKVLAJYNO\HKPG\ASAAP\CCVPQALEP\ LPIVYY\VGRKPKVQEQLSNMIVRSCKCS
5904	3	1126	MMEETENAINTFKEEQRLIYEELIKEEKITTNNELSAISRKIDTW ALGINSSETKAFAISSKVPDVKVTPTSTLFEVEVLDFEKFLQQTGG RQGAWDYDHQNFVUKRNKHKGKPTFMEEVLEHLPGKTQDEVQQ HEKWYQKFLALERKKEISIWIWTKKQQKREEIFKLKEKADNTP VLFHNKQEDNQKQKEEQRKKQKLAVEAWKQKSIEMSMKACASL KEEEEKEKKHQKERQRQFKLKLLESYTQOKKEQEEFLRLEKEI REKAKEAEKRKNAADEISRFQERDLHKELEKILDROAKEDEKSQ KQRRLAKLKEKVENNVSRDPSRLY/NTHQRLGRTNQKDRTNRRLW ATSTYPT*GYSNLETNRTEKSMR
5905	287	2912	MASPPPRVNEKEITVRLRTIGELLAPAAPFDKKCGRENWIVAFAP DGSYFANSQGHRTVKLVPWSQCLQNFLLHGTKNVTNSSLRLPR QNSDGGQKPKPREHIIDCGDIIVWSLAFGSSVPEKQSRVCVNIEWH RFRFGQDQLLLATGLNSGRRIKIWDVYTGKLLLNLDHTGVVRDL TFAPPDGLSLILVSASRDKTLRVWDLRDDGN\MMVKLRGHQNWVY\ SCAFSPDSSMLCSVGASKAVVAAILV\RLCWHHSHTGATMVL WAERVASLATGLGATFTG*SNLAFV1QGVLYVHQRWCMSMTCF SFFLFFFKVISPFTVKYH*LLSKLIFQFYGIGSLTSETNLM\SI WLSNGFSVLLFFGILSDSRDILRL\FLNLFVLIFF\K*CIVSVQK KKPKKRIALLQERELS*DKPPSSIHLI*QTEVNIR\ILFRAILHS* LLIFRI*NCI*TYS*IIIDPFYIQMTRYDRG*FGKNMVKF*FIEM *LYYFHKIAFSFCNVV\HPCCLPKKFHLAVNILFACSIKFSS*A QVGDPSSL*TSDYLKGRQWSNNNLLTFLRFLSVYFFKLNLVVSGKK REGGL\YLTLFISVYF*LVFGINGFQYSVWVFLHCLYFMFRLLI FKLTFNRMNI*NRICMSALINLKTDNFNLMTMLSIFFKLLIYNA* YNLN*I*QF*YKMCHFVLCMSE*SYNICLFIAGF\LNWMDKYTM